



THE MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

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WEEKLY.

BALTIMORE, MARCH 5, 1887.

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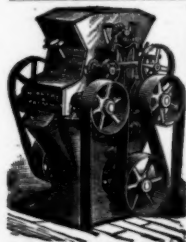
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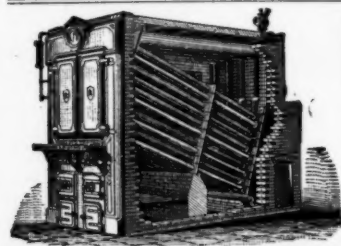
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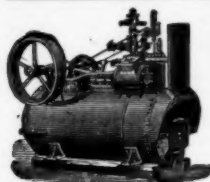
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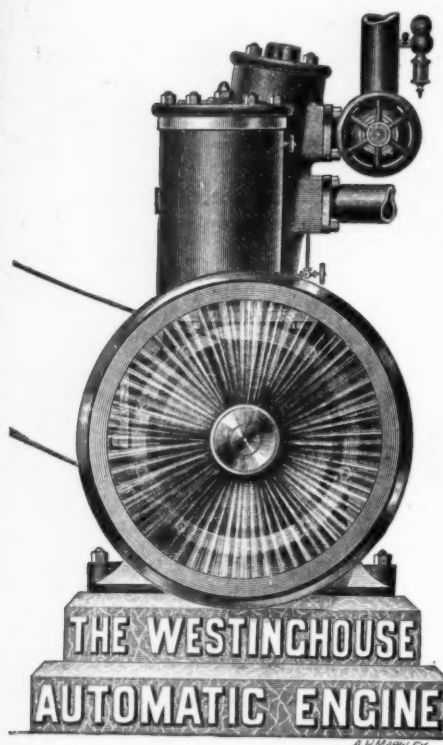
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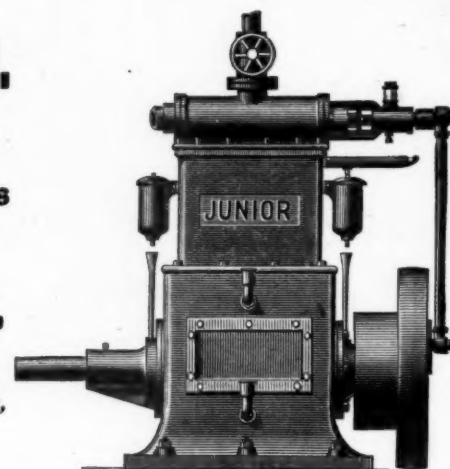
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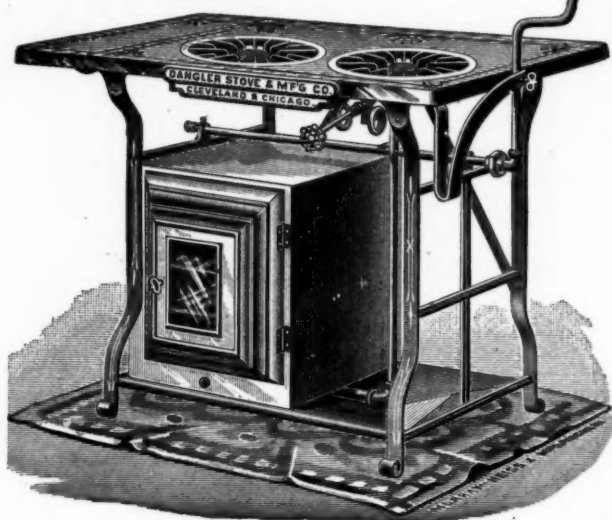
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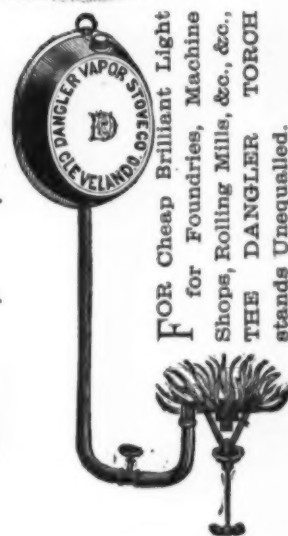
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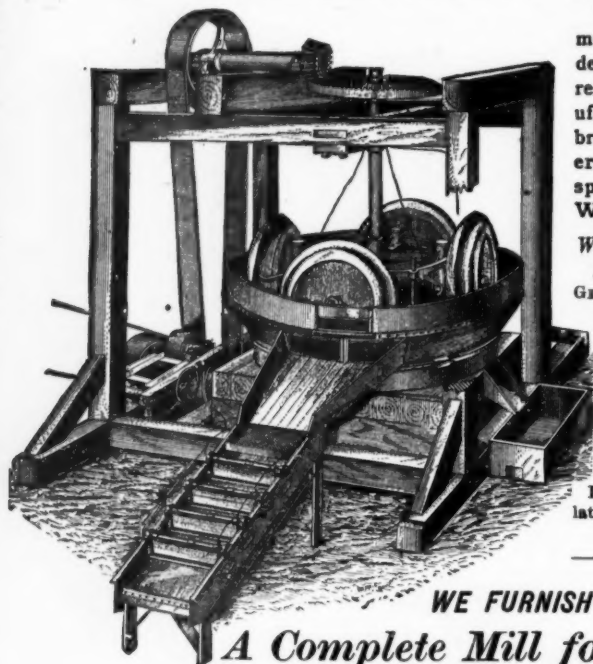
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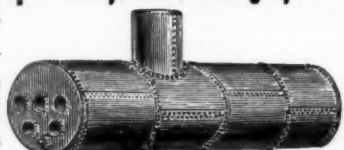
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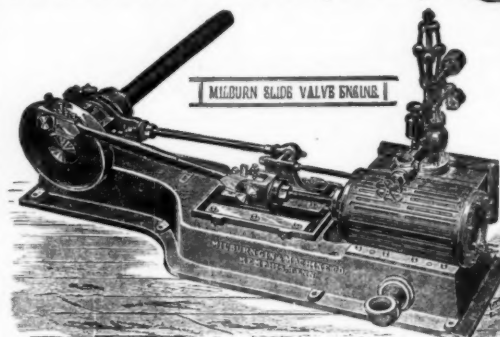
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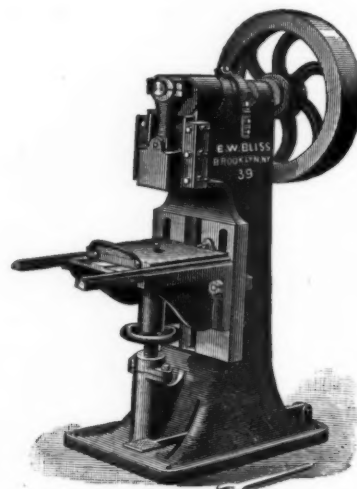
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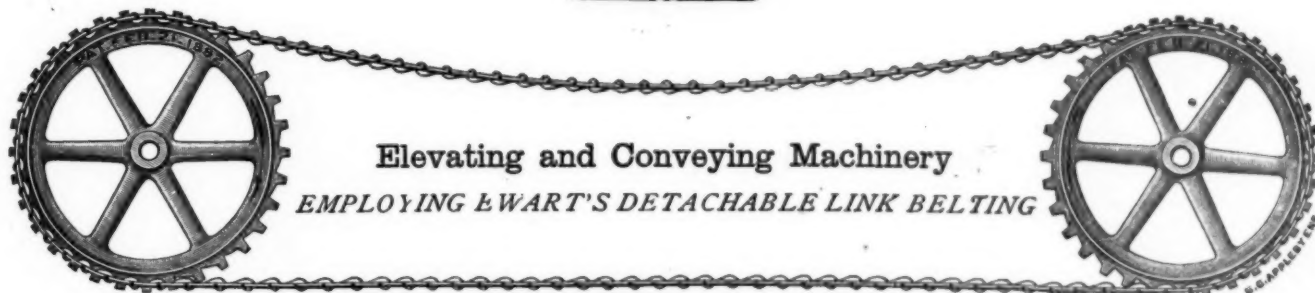
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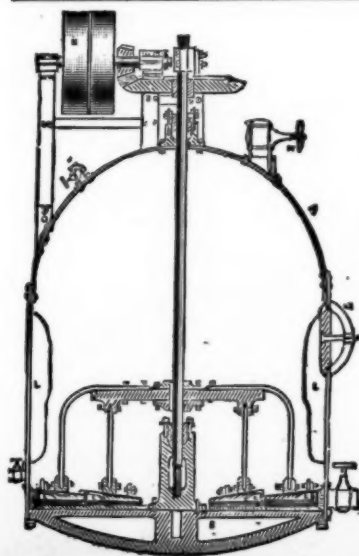
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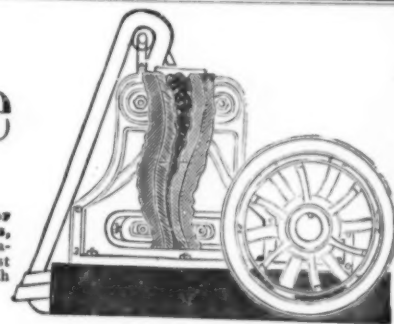
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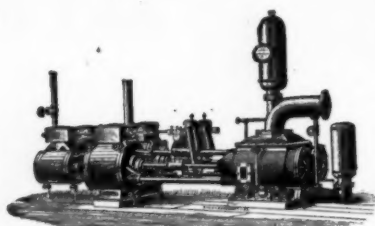
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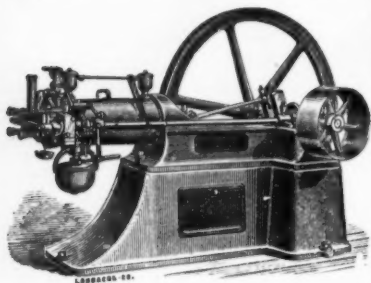
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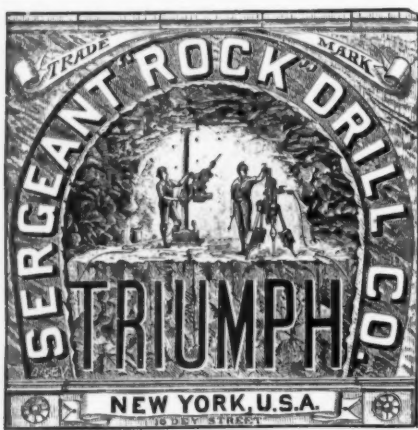
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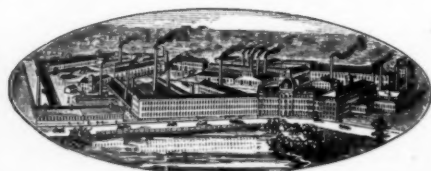
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BALTIMORE, MARCH 5, 1887.

Why They are Going South.

An Ohio manufacturer who proposes to establish an agricultural implement factory in South Pittsburgh, Tenn., is reported by the Nashville American as making the following very sensible statements as to his reason for the change from Ohio to the South:

"My reason," he said, "was principally because I will be nearer to the markets which handle my class of goods. The freights will therefore be lighter, and that is a great consideration. Dealers down here are growing tired of sending hundreds of miles for articles which could be manufactured at home. Also because the cost of production will be smaller. In Ironton I get most of my material from the South, and taking into account the transportation of this, a man can at once see the advantage of being situated in the midst of the section producing this material. It is only a question of time before all the products of the South will be converted here, and when no raw material whatever will be exported. The people of the North are just getting to appreciate the resources and the nature of the people of this part of the country. Northern manufacturers have believed so long that the South was to be merely a cotton-growing region that they have never considered her as a competitor. But they are now coming to a realization of the vastness of the mineral resources, and that in a short time all these will be converted into finished products near where they are brought from the earth."

A Striking Contrast.

The following from the Evening Capitol makes a very strong contrast in favor of the South:

Persons seeking localities for successful investments in business of any kind may get an idea that will be beneficial by examining a recent file of any daily paper having full telegraphic news from all parts of the country and noting the general tenor of industrial items.

The following significant showing will be found in the headlines of such items, not, of course, in every instance, but as the ruling announcements:

NORTH AND EAST.	SOUTH.
"Shut Down."	"Organized."
"Lock Out."	"Inaugurated."
"Strike."	"Incorporated."
"Boycott."	"Being Developed."
"Mobbing the Police."	"Capacity Increased."
"Communism."	"New Furnace."
"Strikers' Riot."	"New Factories."
"Forbidden to Assemble."	"New City."
"Socialistic."	"New South."

This parallel consists of headlines indiscriminately copied from industrial news items in various exchanges throughout the country of recent date, and are more significant than all the argument that could possibly be advanced in support of the South as offering the best inducements for investment in manufacturing enterprises. Capitalists, North and East, should carefully study the lesson here taught.

Words of Warning.

Two weeks since R. G. Dun & Co. said in their usual trade review that there were but two unpromising features "in an outlook generally hopeful." One of these was "the excess of real estate speculation at the South and in some Western localities." Preceding this statement in the same paper were the following suggestive sentences: "People who bought in a week more coffee than the country consumes in months have found it easier to buy than to sell. * * Wheat speculators, confident of foreign war, have kindly enabled farmers to sell many million bushels at 10 cents advance, and are now dropping their burden." This saying is attributed to the late Commodore Vanderbilt, viz: "I always pity the fellow that buys the last hundred shares." The lesson of these several quotations is plain to all who care to know it. In brief, it is the old cobbler's advice to his boy: "Stick to your last." Legitimate business, answering with supply to demand, forecasting what the latter will be and getting ready to meet it, would almost inevitably be safe and remunerative if none but natural influences affected the market. But when speculation steps in and, by adroit and, too frequently, most unscrupulous methods, forces prices much beyond actual values, then all business is unfavorably affected, until eventually "the market breaks" and prices fall to the level of actual values, burying in their fall many a fair fortune, and often ruining beyond recovery old and honored business houses. The evil of what is termed speculation does not end with the ruin of the losers in the game. It affects all classes and conditions of men; it touches all pursuits and all industries, and, worse than all material injury, it debauches the public mind by setting up false business standards. Instead of teaching the wisdom of determining what the market is to be by a careful study of every known thing affecting it, speculation guesses and then makes it bets. It goes further, and makes misrepresentations the better to accomplish its ends. If a small tradesman misrepresents the quality of his goods and thus cheats his customer out of a dime, he is called a cheat, and he deserves the name. When millionaires do the same thing at wholesale and gather in their proportionate gains, they are styled great financiers, and according to the number of their millions is the measure of respect accorded them. Yet if the petty trader of the corner grocery is a cheat, why not they also?

Turning to the statement of Dun & Co. that one of the two unpromising features of the present hopeful outlook is "the excess of real estate speculation in the South" and elsewhere, we ask, is it true? Is there danger that what has been confined to one or two localities will spread like an epidemic through the South, interfere with its stately progress, and

finally prostrate it? The MANUFACTURERS' RECORD has been carefully watching and recording this stately progress for a long time; it has noted the indications of possible overdoing, and has repeatedly uttered its caution, "not so fast." Southern journals of prominent influence, seeing the danger, have joined in the warning, and now the great mercantile agencies of the country and some of the leading newspapers of the North are taking part in it. This interest in Southern progress and this fear that it may receive a severe set-back from excessive speculation are the legitimate results of that great intermingling of the people of all our States since our National Centennial. The people know, understand and are interested in each other. Southern and Northern business men are associated in international and other enterprises of vast magnitude. Commerce and trade, promoted and aided by the many and ever-increasing transportation facilities, are so interwoven that the prosperity of each section is essential to the welfare of all. The caution "go slow," by whomsoever uttered, is a friendly warning. As such it will be accepted by Southern business men and by the people at large, and so the glorious work of the past ten years will prove to be the safe foundation of an assured prosperity.

An Invitation to the Next Enterprise in Search of Location.

The Baltimore MANUFACTURERS' RECORD of the 19th inst. refers to the industry conducted at Greensboro, N. C., by the "North Carolina Coach Material Company," which has grown into a large business. Greensboro is a railroad center, and has more than doubled its population during the past few years. The business generally has increased, but there is only about \$100,000 of banking capital for the accommodation of all interests. The "coach material company" has expanded its business, and commanded a trade above the banking accommodations necessary to hold it. Whilst retaining its local habitation, because of facilities in procuring raw material and having good transportation in all directions, it has moved the chief of its trade supplies to Richmond, where the capital for accommodating time-sales can be more readily obtained.

Greensboro, in railroad opportunities, is somewhat like Staunton, and Staunton like Greensboro, has an abundance of raw material of nearly all kinds at her doors; and then Staunton has what Greensboro is asking for, a full supply of capital, and offers the best of facilities for successfully opening manufacturing industries. A large fire-proof building, immediately on a siding of the Chesapeake & Ohio Railway, and within the city, can be had on the most favorable terms, and then to any legitimate and well-grounded business, wanting accommodations upon its time-sales, there will be no difficulty on that score, for we have two national banks with a paid-up capital of \$300,000, carrying reserves and undivided profits equal to the capital and a full line of deposits, doing business at 6 per cent. interest.

Thus it will be observed that Staunton has every requisite to invite the location of industries, and the means to build up prosperous manufacturing, as it has a superior grain and other commercial interests. May we not ask the kind assistance of the MANUFACTURERS' RECORD, that is doing so much

to aid in developing the South, to keep a lookout for the future, and direct to Staunton practically-informed and good business men seeking to establish themselves in manufacturing pursuits. — Staunton (Va.) Spectator.

The MANUFACTURERS' RECORD will take great pleasure in aiding to its utmost the building up of Staunton's industries. But are the people of Staunton themselves doing their full measure of work to let their advantages be known, and to establish new enterprises? It only needs, we believe, well-directed energy and enterprise to start such an industrial awakening in Virginia, as we now see in Alabama and Tennessee. In Alabama, wherever a united effort on the part of the business men of a town is made to organize new companies, activity soon takes the place of former dullness. The same thing can be done in Virginia, but the people of Virginia themselves must begin this work. In Alabama home money and home enterprise are leading in the wonderful developments that are attracting the world's attention, but we regret to say that in Virginia this is not so noticeable. In the southwestern part of that State Philadelphia capitalists, who were instrumental in building up Roanoke from a village of 300 inhabitants to a pushing, busy town of 7,000 or 8,000, and who have developed the coal interests so rapidly that in 1886 nearly 1,000,000 tons were taken from mines which a few years ago were in an almost unbroken wilderness and where now stands Pocohontas, with its 4,000 or 5,000 inhabitants, are preparing to do even greater things at Pulaski and in the Cripple Creek section. This ought to mark the beginning of great activity in the entire mineral section of the State, but it will not do to depend too much upon outside men and money.

At a recent meeting of the Farmers' Alliance in Dallas, Texas, a proposition was made to raise \$5,000,000, with which to build cotton and woolen mills, to be owned by the Alliance. The membership of the Alliance in Texas is put at 235,000, and it was thought that enough of them would subscribe \$20 a piece to start this undertaking with \$2,000,000, the balance to be raised later on. The outline of this plan has been sent to every lodge in the State, with a view to securing definite action at the general meeting to be held on the 4th of May. The Alliance has succeeded in building quite a large number of flour mills in Texas, and as its members are even more deeply interested in the establishment of cotton and woolen mills than in flour mills, it seems quite probable that favorable action will be taken on this proposition. The money could no doubt be readily raised in small sums as was suggested.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

A \$5,000,000 Cotton Seed Oil Mill Co.

A gigantic corporation has been formed to build cotton seed oil mills throughout the South. A special telegram from an authoritative source to the MANUFACTURERS' RECORD states that "the company will be organized under the laws of New Jersey, with a capital of \$5,000,000. Mills will be built of large capacity at points throughout the whole cotton seed territory. The incorporators are the best oil mill men in the South and the largest consumers in the North. Four times the necessary money could be obtained. The organization will be within ten days or sooner."

We have known for some weeks, but only with the understanding that no mention whatever should be made of the matter until it was fully consummated that this syndicate was being organized. For a long time work on it has been vigorously but quietly pushed, until it is now, so we are positively informed, an absolutely accomplished fact. The money has been secured and the plans arranged on a basis broad enough, it would seem, to assure success. The Cotton Oil Trust now controls the great majority of Southern oil mills. These mills were largely built when machinery was high and before many of the most important improvements had been made. The old mills are thus seriously handicapped at the start by high cost and to some extent antiquated machinery. The new organization, with a capital of \$5,000,000, will build in the most important centers very large mills, and having the full benefit of years of experience, they will construct them in such a way as to assure the very smallest cost of operation and with the newest and best machinery that can be had. The men who are at the head of this organization are thoroughly experienced in the building and operation of cotton seed mills, and moreover this company will have the advantage of having among its members some of the largest cotton seed oil consumers in the country. Among those known to be principally occupied in the formation of the company are Henry C. Butcher, of Philadelphia, and Fred. Oliver and D. A. Tompkins, of Charlotte, N. C.; the other subscribers will not be made public until after the organization of the company. Mr. Henry C. Butcher is a member of the great packing and lard refining house of Washington Butchers' Sons. Mr. Oliver is of Oliver Bros., who owned two large oil mills at Charlotte, N. C., and Columbia, S. C.; and Mr. Tompkins is a very prominent engineer, the Southern representative of the Westinghouse Engine and the Westinghouse Electric Light Companies. He has been intimately identified with the cotton-seed oil mill interests of the South.

There are now about 140 to 150 cotton seed oil mills in the South, the

aggregate capital stock of which, prior to their absorption by the Cotton Oil Trust, was about \$10,000,000. The Trust, it is understood, has issued its certificates to the extent of \$40,000,000, the proportion of water it is seen being rather large. The new company could doubtless with its \$5,000,000 capital, duplicate at the present low cost of improved machinery the entire crushing capacity of all the mills now in the South. It is thus in a position to enter the fight prepared to hold its own, and this means better prices to the Southern farmer for his cotton seed.

Is there Danger of Making Too Much Iron?

The correspondent of the New York Times, who is now traveling in the South, seems to be greatly worried for fear there will be a collapse in Birmingham's iron interests, because he thinks that with the next decline in prices there will be so much pig iron in the South for which no home market can be found, that it will be forced to go a begging in Northern markets at a loss to its producers. We hardly think that this correspondent need let this trouble him, and if anybody in the North is complacently looking, and we hope there are none such, for a general break-down in Southern iron interests, they will be sadly disappointed. The South is in the field to stay.

We believe that it is now admitted everywhere that the South can produce pig iron at a much smaller cost than any other section, but say some of the critics "you must add to this the expense of freighting it to Northern markets, as the South has not sufficient diversified industries to consume its pig iron." Granted that this may be true at present, it is no proof that it is always to be true. The South, if it so desires, can continue to ship its surplus iron West and North and to make some money on it, notwithstanding the assertions that were so often heard in 1885 and 1886 that the South was losing money on every ton of iron shipped North. The South, however, prefers to make an extra profit on this iron, and this works to the benefit of all classes, by reducing the cost of their manufactures of iron and steel; it is preparing now very rapidly—so rapidly, in fact, as to be wonderful—to increase its home consumption of iron. The correspondent of the Times has possibly failed to take into account the rapid growth of diversified industries. One of the most noticeable signs of the South's industrial progress is the great attention that is being given to the establishment of machine shops, foundries, pipe works, agricultural implement factories, stove works and similar enterprises that will take the pig iron made in Southern furnaces and turn it into manufactured goods to supply the vast consumptive demand which has heretofore been drawn from the North, thus making a home market for Southern pig iron and saving to

the South the cost of paying freight on its iron North and then paying a second freight as it comes back in the shape of manufactured goods. With but few exceptions every new company that has lately commenced the construction of new furnaces in the South, has also made arrangements for the building of other industries to consume the iron. Take Anniston, for instance, where two furnaces of 150 tons daily capacity each are under construction. Pipe works to consume from 200 to 300 tons of iron a day have been decided upon and the entire capital needed for their construction and operation raised. The extensive machine shops and rolling mills now in operation there are to be greatly enlarged, and it is possible that they will form the nucleus of a \$1,000,000 plant, as negotiations for this are now pending, while other iron industries will also be established there. Thus, while Anniston prepares to add immensely to her output of pig iron, she has already made arrangements for consuming the entire increase, and will possibly need even more furnaces to supply her own industries.

At other places we see the same thing. At Bessemer two furnaces are under construction, and to use up this iron a \$500,000 rolling mill and other enterprises are under way. At Decatur, the same company that has contracted for the building of three furnaces, has, notwithstanding the advantage of water transportation for shipping its iron, arranged for the building of an agricultural implement factory to employ 300 hands, works to manufacture steam pumps, engines, etc., a machine shop and a large number of other enterprises. Sheffield, where five furnaces are under contract, is to have a \$100,000 pipe and nail factory, all of the stock having been subscribed, while a \$250,000 rolling mill company is being organized, in addition to which there are to be many other industries that will help to increase the demand for pig iron. Chattanooga is developing its diversified industries so rapidly that instead of having a large surplus of pig iron for shipment, it is more likely either to have to build new furnaces or else to buy some iron from adjacent furnaces.

For several years the MANUFACTURERS' RECORD persistently labored to impress upon the South the importance of diversifying its industries, and to arouse an interest in other iron enterprises than furnaces, and this we are glad to say is being done as never before. It is the surest foundation on which to build a gigantic iron industry that will stand solid and unshaken even though prices may, as in the natural order of events they will, decline. That every furnace built in the South will prove a financial success is of course not to be expected. Some will be built where the advantages are not such as to justify the erection of a furnace, some will be badly managed and some will not have enough working capital, but these few, here and there, will not seriously affect the iron industry of that section. This is building up too solidly to be hurt by such events.

The Attractions of Wilmington, N. C., as a Winter Resort.

[Special Correspondence MANUFACTURERS' RECORD.]

WILMINGTON, N. C., Feb. 24, 1887.

If the time ever shall come for the good people of this city to acquaint the world with the attractions that lie in and all around it, then will soon follow such a steadily augmenting tide of winter visitors as few Southern cities have enjoyed. This statement is based on the supposition and belief that when her citizens are aroused to their opportunities, they will prepare to improve them. At present Wilmington has but limited accommodations for visitors. Her few hotels could, perhaps, by extraordinary crowding, provide for 500 transient guests, and her boarding houses for as many more, but any greater number would have to accept private hospitality or else to walk the streets. The Orton, the Purcell and one or two other hotels suffice for present requirements, but will not a year or two hence, for the success of the Orton has demonstrated again the truth of the saying that a first-class hotel will attract more people to a town than any other branch of business. The proprietor of this finely appointed and admirably managed house ought to increase its capacity several hundred per cent., and then he would be able in winter to accommodate a small part of the host of patrons of the Northern seaside houses of which he and other members of his family are proprietors. Ever since the Orton opened there has been a marked increase in the number of strangers visiting the city. If it were known that there was always room for one more at this hotel, there would be no lack of guests from October to June.

The leading attraction Wilmington has for the tourists that usually hibernate in Florida is its soft and genial atmosphere. The annual mean temperature of Smithville, at the mouth of the Cape Fear river, is the same as of Mobile, Ala., while that of Wilmington (63 degrees) is but three less, and corresponds with that of Jerusalem, in the Holy Land, and of Nicolassi, Sicily. In other words, this southeastern section of North Carolina, for a belt 50 miles along the coast and 40 miles inland, has a semi-tropical climate equal to that of Florida. The late Professor Kerr, State geologist and botanist, was wont to say that this country, with its isolated semi-tropical climate, must have been cut off from Florida and floated to its present anchorage. The three southernmost centers for the grand divisions of the army of winter tourists are Jacksonville and Tallahassee, Fla., and Thomasville, Ga. At none of these is the mid-winter weather more delightful than at Wilmington, while in March and April the warmth and humidity of the atmosphere of those localities are very enervating to many who would obtain here all the climatic benefits they came South to secure. Major W. L. Young, a civil engineer who has resided here the past 20 years and has studiously investigated the climatic peculiarities of this region, attributes the difference in humidity to the fact that "here the winds are breezy;" they never blow from one quarter more than 48 hours. Hence this section is seldom troubled with fogs, and "the humidity is precipitated in quick rainfall, while on the Gulf and south Atlantic coasts humidity is the normal condition of the atmosphere." It is a curious fact, and one that seems to confirm Major Young's theory, that this semi-tropical belt is "free from snowfall," except that about once in 10 years there is a sprinkle of snow that disappears almost as soon as it touches the ground. Nothing better illustrates the mildness of this climate than its winter flora. In every month from October to May flowers of some kind may be found in bloom out of doors. Japonicas are now in their glory, and the stately trees in many front yards are masses of brilliant color. Many shrubs are in bloom, and the air is perfumed with the fragrance of hyacinths and English

violets. All vegetation is as far advanced here now as it will be in New York by the middle of May.

In this city, where the old and new are intermingled, the tourist will find much to occupy him. If fond of history, he can go to Cornwallis' headquarters, to St. James Protestant Episcopal Church, and to the house where William Hooper, a signer of the Declaration of Independence, lived and died. And if he does not remember the eventful history of St. James Church he can have it told him by worthy Doctor De Rosset, or by any one of the many courteous old gentlemen he will be sure to meet. Out in the eastern suburbs is Oakdale Cemetery, a quiet and beautiful resting place where sleep many men of State and national fame. For persons fond of the bustle and activities of life the water front is the most interesting part of the city. At all the wharves are steamers and sailing craft receiving or landing their cargoes. Sailors of many nationalities are at work on their ships, or strolling about in holiday clothes to see the sights; the darkey draymen and their mules, the cotton jammers loading a foreign bound ship, ancient uncles sitting serenely on the bulkheads waiting patiently for the fish to bite, tugboats puffing beside the rosin and cotton laden craft they are towing seaward, dozens of rafts, on which are naval stores or lumber, or both; lighters, full and empty, floating with the tide, or making headway slowly against it as the brawny rowers throw all their weight upon the big and clumsy sweeps; these and a multitude of other scenes are the parts of that panorama that every secular day is unceasingly unrolling along the water front of Wilmington. Wearying at last of this interesting display, the stranger will find it pleasant to visit one of the rice mills and see the process by which this pearly grain is extracted from its husk, and carried through various processes until it becomes the polished translucent thing he has known from childhood. Then he can drive down to the works of the Carolina Oil & Creosote Co. and see how the fat pine logs are made to yield their oils, and how the soft, sappy timber is deprived of its moisture and then filled in all its pores with the oily juices of the pine. And after he has exhausted the sights of Wilmington there remains for her visitor many pleasant excursions by land and river; hunting and fishing expeditions for those fond of such sport; seaside dinners and grand marine views at the end of an eight miles drive over a splendid shell road; trips to plantations and vineyards; a hunt with the local fox club, in which his ladies may participate if they desire, and a host of other things to make him forget his ailments, to distract his mind from business, and to "drive dull care away." Finally there is the Cape Fear Club—a model of its kind. Every accredited visitor to Wilmington is a welcome guest, and admitted to all its privileges while he remains in the city. There men who fought either side in the late contest meet together in pleasant social companionship and "fight their battles o'er again." There the stranger is introduced to many of the most prominent business men of the city, and whenever he is in need of information of any kind concerning the city or the surrounding country there he will find some man who can impart it. For the best and truest kind of courtesy to strangers, this and the club similarly conducted at Norfolk, Va., take the palm.

B. S. P.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

MINING NOTES.

By T. K. BRUNER, Raleigh, N. C.

THE RUSSELL MINE.

This mine, at Glenbrook P. O., Montgomery county, is owned by the Russell Gold Mining Co., limited, 27 Throckmorton street, London, Eng. It is under the general superintendence of William Reed, M. E., and A. S. Wood, assistant manager. The claim comprises about 400 acres in the heart of the El Dorado district. The general formation is Huronian, while the veins are chloritic slate with quartzite. The country rock is a compact slate, and the ore may be described as a hard amorphous quartzite, carrying a small percentage of pyrites. This material is taken from a vein twenty feet thick, and has an average value of from \$5 to \$10 to the ton. The situation is favorable for the economical handling of the material. The amount of ore in sight can hardly be estimated, though the quantity is large as indicated by the size of the lode. Just now they are sinking through a solid body of good ore, which promises an immense reserve.

They have an engine shaft and a subsidiary shaft, and the slopes are opened for a distance of two hundred and fifty feet on the course of the lode. They have a twenty-stamp mill, air compressor and other necessary machinery, which is valued at more than twenty thousand dollars; besides, there are a dwelling, mill and compressor houses, office and miners' cabins, which are worth five thousand dollars more.

The prospects of this property are extremely good, considering the amount of exploitation. Were it fully developed this report would present definite figures. Negotiations are pending which will greatly facilitate present operations, and at the same time open up the property. All the indications point to a reasonable probability of a continuance of the quality and quantity of the material—on this the success of the property depends.

REPORTS FROM THE WEST.

In the extreme southern part of Jackson county, between Georgetown and Cashes Valley, the finding of a new auriferous quartz lode is reported. The value of the find has not been determined as yet, but from the surroundings it is expected that a fair material will be found. The fact that such discoveries are reported shows that the efforts now being made to bring to light the minerals of these far western counties is meeting with the success anticipated.

Further west, in Cherokee county, the placer deposits on Valley river are coming into notice. Gold has been known to exist there for many years, and petty mining has been conducted there at intervals with varying success. The situation demands a thorough examination, as those familiar with the locality incline to the belief that fissure veins will be found above the present placer beds.

Cherokee also possesses great wealth in the abundance of the high grade iron ore found there, but this must wait for the coming of the railroads for development. There is one thing the county needs, and needs much, that is broad-minded, progressive public men to represent her great interests. Poor, indeed, is the country that must depend altogether on exterior influences to bring notoriety to its material resources!

ACCORDING to the report of the United States Internal Revenue office at Jacksonville, the number of cigars and cigarettes manufactured in the district of Florida during the year 1886 was as follows:

Cigars.....	86,238,875
Cigarettes.....	965,460
Number of pounds of tobacco used.....	1,647,785
Tax on cigars and cigarettes.....	\$259,199.35½
Manufactured during year 1885.....	61,124,490

The increase over 1885 was 41 per cent.

This will be largely increased in 1887 and 1888 by the production of some immense factories to be put up at Key West.

Developing Iron Ore Lands.

[Special correspondence MANUFACTURERS' RECORD.]

GREEN FOREST, Feb. 25, 1887.

There are indications that large operations will be conducted here in the early spring. Prospecting parties, representing Northern capital, are looking over the Buena Vista ore lands, which embrace five miles of the Blue Ridge mineral belt, and exhibit an immense outcrop of very rich ore. It also lies in the tin and manganese belt, and adjoins the Irish Creek mines. There are several places on this property where the ore, of very fine quality, can be mined in open quarry to a depth of sixty feet before it would be necessary to shaft and tunnel. The iron made from this ore commands a very high price in the market, where it is known as the "Virginia and Amherst warm blast." Capt. C. F. Jordan has also opened mines on the Green Forest lands, where he has discovered ore of fine quality, and flattering traces of very rich manganese. He is now engaged in developing these ores, and will ship large quantities to Virginia furnaces. Large deposits of ore have also recently been discovered on the "Brady lands," now owned by a New York gentleman. The quality is said to be very fine, and the quantity, on this tract alone, sufficient to supply the largest furnace indefinitely. Where these ore veins jut into adjacent lands they are being developed by Messrs. Marx & Matthews, who intend to ship large quantities. A scheme is on foot to unite these large ore tracts, and build one or more furnaces at or near Green Forest. There are two railroads here, and a beautiful site for a manufacturing city, covering a thousand acres of level and gently rolling land lying against the base of the mountain. The parties to the scheme have already sold, or guarantee to sell, five hundred lots at one hundred dollars a piece for the company which agrees to build a furnace here and lay out a town. We hope soon to send you the news of a great enterprise at this place. The Messrs. Geo. J. Appold & Son are enlarging their tannery. Green Forest offers special inducements to any manufacturing enterprises locating here. B. C. M.

Building Up Rome.

ROME, GA., Feb. 21, 1887

Editor Manufacturers' Record:

The Rome Land, Import & Manufacturing Co., lately organized here, have purchased a large tract of land west of Rome, where they propose to build up a new town. Several new iron bridges are to be built across the Oostanaula, one to cost \$25,000 and one \$15,000. Plans are being prepared for extensive industrial enterprises, which will develop this city and the adjacent country. A marble company has been formed to operate just outside the corporate limits of Rome. The Rome & Decatur (Ala.) Railroad, which is being pushed rapidly through, will have its depot between Rome and Forestville, and at that point a new town is laid off called "Printup City." The Rome & Decatur road is building an iron bridge across the Oostanaula a mile above Rome. This road will develop coal and iron fields of inexhaustible supply within twenty miles of this city. Some of these are being opened now, with fine yield. Manganese in great quantities is found on the E. T., Va. & Ga. road within five and ten miles of Rome, and it is being mined and shipped to Pittsburgh and Philadelphia in large quantities. The Rome & Carrollton and the Rome & Chattanooga Railroads are under construction. These new roads pass through a country which is full of coal and minerals, hitherto untraversed by railroads. A brick company, known as the Rome Brick & Tile Co., with a capital stock of \$50,000, has recently been organized here, and it now has thirty or forty hands at work. The Etowah Manufacturing Co. has been recently organized, with a capital stock of \$50,000, to establish a furniture factory. Their machinery has been ordered. Printup City is to be the location for several blast furnaces, foundries and machine shops for the Rome & Decatur road. T. M. HOLMES.

Activity at Sheffield.

SHEFFIELD, ALA., Feb. 22, 1887.

Editor Manufacturers' Record:

In the wonderful progress of the industrial interests of the South Sheffield keeps well up with the procession. This will be made very evident by a simple statement of what is now being done here. We have five large iron blast furnaces, with an aggregate daily output of 700 tons, now under contract between such responsible parties as Col. E. W. Cole, Col. Enoch Ensley and others, and the contracts for the construction of the same are now in the hands of furnace builders. These five furnaces when completed, in the words of a distinguished Nashville authority, will insure for Sheffield a population of 15,000. A \$100,000 cotton compress company will be ready for the cotton business next fall; a \$250,000 rolling mill company is being organized; two large steam wood-working establishments are already built and doing a flourishing business; two steam brick-making works are daily turning out thousands of bricks, that are known far and wide for their beauty. The Memphis & Charleston Railroad Co. expect to be running their trains into Sheffield in about 30 days, and the principal shops of their line will be located at Sheffield. These shops insure, it is said, a population of 1,500. It is a matter of contract between the Sheffield Land, Iron & Coal Co. and the Louisville & Nashville Railroad Co. not only to build the branch road of their line, which now runs to St. Joe, to Sheffield, but to establish the shops of this branch at this town, and the engineers are now at work locating this line. The road is to be known as the Nashville, Florence & Sheffield Railroad. The Sheffield & Birmingham road, now daily running its trains into Sheffield, will also establish their shops here. Another road will in all probability be built to Cullman, Ala., passing through the vast mineral fields owned by a Montgomery syndicate, of which Moses Bros. are large stockholders. Capt. A. H. Moses is at the head of this enterprise, and he has the reputation of succeeding in every thing that he undertakes. The eyes of railroad magnates in various parts of the country and railroad projectors are turned toward Sheffield, and that this place is destined to be a great railroad center, as well as a steamboat landing of vast importance, there is no room for doubt. Already the place is full of life, and the building boom is now upon us. The Sheffield & Tusculumbia Street Railway Co. have a large force at work, and the managers of this road expect to be running cars between Tusculumbia and Sheffield by the middle of next month. The Sheffield Real Estate Co. will finish their three-story block of six buildings on Montgomery avenue. The Mobile Real Estate Co. are erecting two iron front storehouses; B. Wolff & Bro., of Montgomery, are preparing to erect a two-story brick business house on Raleigh street; the S. & B. R. R. are erecting an iron-covered depot at the foot of Montgomery avenue; the Sheffield Hotel Co. have advertised for bids on one section of their \$130,000 hotel—this section to cost \$40,000. E. J.

PINE MOUNTAIN, GA., Feb. 28, 1887.

Editor Manufacturers' Record:

Substantial improvements are gradually but steadily being made in this village and environs. Besides the many good framed houses that have been erected in this locality in the last twelve months, there are others under construction, and notably among them is a mammoth store for a mountain village. New veins of corundum have been found during the last ten days, and the mines here will be operated with a greater force and more energy than ever before. The indications are that more mica mines will be worked than ever before in this region, while numerous most favorable hill-sides will be set in vines, as it has been demonstrated that grapes grown here are second to those of no other locality. It will be the last of April before work begins on the hotel, which it is intended shall be of sufficient dimensions to accommodate travelers, tourists, invalids and visitors to the Sulphur Spring. J. W. WALKER.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

A company has been formed at Cullman, Ala., to build water works, with J. H. Karter as secretary and William Bower, treasurer. The directors are George H. Parker, A. Dreher, G. A. Print, F. Allrich and John G. Cullman.

A. C. Stuckey & Co., Oxford, Ala., will erect a bloomery at Oxanna.

The Southern Bridge Co., Birmingham, Ala., are putting in new machinery and will add boiler works and the manufacturing of bolts, nuts, rivets, &c.

A \$100,000 company will be formed at Sheffield, Ala., to build a cotton compress. A. J. Moses can give particulars.

A \$250,000 stock company is being organized at Sheffield, Ala., to establish a rolling mill. A. J. Moses can give information.

The Elyton Land Co., Birmingham, Ala., will build a round-house and machine shops.

The Tennessee Coal, Iron & Railroad Co., Nashville, Tenn., are building 800 coke ovens at Pratt Mines, Ala., previously reported.

F. C. Iwerson and A. J. Golding, Selma, Ala., reported last week as to erect an ice factory, have ordered their machinery. The capacity will be 10 tons.

J. & D. Noble, Anniston, Ala., have ordered new machinery to double the capacity of their boiler works.

W. W. Barnes, Opelika, Ala., superintendent East Alabama Railway Co., will receive bids until March 15 for constructing, grading and furnishing cross-ties for the 17½ miles of road from Buffalo to Roanoke.

Pinckard, De Bardeleben & Co. will erect a large four-story building at Birmingham, Ala.

The Pawnee Land & Mineral Co., capital stock \$200,000, has been incorporated at Ashville, Ala., to engage in mining and manufacturing, by Clavius Phillips, Octavius Cohen, E. M. Green, Joseph J. Wilder, John F. Wheaton, H. G. Cohen and John Postele, of Savannah, Ga.

The No. 1 furnace of the Woodward Iron Co., Wheeling, Ala., has been blown out to be relined.

J. C. Haas and associates of Montgomery, Ala., previously reported as purchasing 6,000 acres of coal lands in Walker county, have organized the Jagger-Townly Coal & Coke Co., capital stock \$400,000. J. C. Haas is president; J. H. Chambers, vice-president; J. T. Roberts, secretary and treasurer, and P. J. Anderson, general manager.

John T. Davis, W. C. Koonce, W. P. McGriff, J. S. Koonce, J. Moody, A. D. Wood and others have incorporated in Alabama the South Alabama Railway Co., capital stock \$500,000, to build a railroad from Columbia to Evergreen.

W. C. Jemison, Tuscaloosa, Ala., and William G. Cochrane, George A. Searcy, E. N. C. Snow, B. Friedman, J. J. Harris and H. F. Hill have incorporated the Macon & Tuscaloosa Railroad.

A manufacturing and improvement company has been formed at Tuscumbia, Ala., by James Jackson, A. H. Keller, Robert Cloud, L. B. Thornton, Z. H. Lassetter and others.

Mr. Holland has received the contract to build 20 houses for the Anniston City Land Co., Anniston, Ala., previously reported.

W. T. Farrar, Macon, Ga., is removing his planing mill to Anniston, Ala. He has received the contract to build 20 houses for the Anniston City Land Co.

A \$60,000 stock company will be formed to erect a Morse cotton compress at Decatur, Ala. W. E. Forrest can give particulars.

It is stated that Cincinnati parties will establish a shoe factory and a tannery at Decatur, Ala. The Decatur Land, Improvement & Furnace Co. can probably give particulars, if true.

There is talk of an ice factory being built at Opelika, Ala.

Bowling & Willson, Clarksville, Tenn., will not build an ice factory at Tuscaloosa, Ala., as lately reported.

The Birmingham Gas & Illuminating Co., Birmingham, Ala., will enlarge their works to four times their present capacity, previously reported.

Moses Bros., W. L. Chambers and L. Polak, of Montgomery, Ala., lately reported as purchasing 158,000 acres of land at Cullman, and to develop it, open mines, quarries, &c., will, with John G. Cullman, of Cullman, and others, organize a company with \$2,500,000 capital.

Graber & Sons, Athens, Ala., are trying to organize the electric light company reported last week.

The capital stock of the Tuscaloosa & Castle Hill Real Estate & Manufacturing Co., Tuscaloosa, Ala., reported last week as incorporated by J. H. Fitts and others, is \$350,000. The company is sinking a shaft to develop coal lands.

The Eufaula Water Co., capital stock \$60,000, has been organized to build water works at Eufaula, Ala., with S. H. Dent as president; W. L. Chambers, of Montgomery, vice-president, and E. B. Young, secretary. W. D. Chapin, of Birmingham, previously reported as contracting to build water works at Eufaula, is one of the directors. Bids for a stand-pipe, pipes, engines and other machinery will soon be wanted.

The Alabama Phosphate & Manufacturing Co. will be organized shortly to develop phosphate beds near Hamburg, Ala. Richard & Erdich, Vilula, can give information.

The Selma Land, Improvement & Furnace Co., Selma, Ala., previously reported as incorporated to build furnaces, rolling mills and establish manufactories, has been organized with R. M. Nelson as president; W. P. Armstrong, vice-president; T. H. Hopkins, secretary, and A. G. Parrish, treasurer. The capital stock has been fixed at \$600,000.

H. F. De Bardeleben has been elected president, and David Roberts, secretary and treasurer of the Bessemer Rolling Mill Co., of Birmingham, Ala., previously reported to build a large rolling mill at Bessemer City. Work is to be commenced at once.

A. W. Wills, of Nashville, Tenn., and others, previously reported as purchasing the Cypress Cotton Mills, at Florence, Ala., and to refit them with new machinery, have organized with Mr. Wills as president; W. P. Campbell, secretary and treasurer, and D. J. Jones, superintendent. The improvements will be made at once.

The Central Railroad Co. (office, Savannah, Ga.) have purchased additional land at Birmingham, Ala., for the location of shops, round-house, &c.

The negotiations that have been pending for several weeks with a view to the turning of Noble Bros. & Co's machine shops and rolling mill at Anniston, Ala., into a \$1,000,000 stock company to erect immense works, have not yet, it is said, been fully consummated, though it is reported that the prospects are favorable.

T. H. Nance will start a small machine shop at Talladega, Ala., and wants price-lists and circulars of water motors, coal oil engines, small power planers (iron), drill presses, portable forges, &c.

Coleman & Reynolds, Cincinnati, Ohio, manufacturers of horse shoes, contemplate moving their rolling mills and factory to some point in the South, probably Montgomery, Ala.

L. M. Henry, Ironton, Ohio, will probably start a saw and planing mill at Decatur, Ala., soon.

A company has been formed at Gadsden, Ala., to build a 10-ton ice factory. Machinery is being purchased.

Graber & Son, Athens, Ala., have received the contract to build 30 cottages at Decatur, for the Decatur Land, Improvement & Furnace Co.

A \$12,000 stock company has been organized at Decatur, Ala., to build a 5-ton ice factory, with Mr. Harris as president; W. E. Forest, secretary, and W. W. Littlejohn, treasurer. Work will commence at once.

A saw mill will be started at Mount Roszell, Ala., by Card & Cunningham.

E. J. Mosher, representing the Brush Electric Light Co., of Cleveland, O., is in Tuscaloosa, Ala., negotiating for the erection of a plant.

A bill has been introduced in the Alabama legislature to incorporate the Warrior Mineral & Mining Co.

Shaw & Davin, Birmingham, Ala., have sold a saw mill to W. D. McCarter, Bryan's Station.

The New Orleans & Alabama Coal & Coke Co., capital stock \$1,000,000, has been organized at Birmingham, Ala., with John T. Hardin, of New Orleans, La., as president, and Mr. Behan, New Orleans, vice-president. The company owns several thousand acres of coal lands in Walker county. They will open mines and build coke ovens.

A company has been incorporated at Tuscaloosa, Ala., to build a 100-ton iron furnace.

Andrews, Schofield & Brannan, Birmingham, Ala., have received the contract to build a sewer at \$12,000.

The Birmingham Iron Bridge & Forge Co., Birmingham, Ala., will increase their capital stock of \$250,000 and add a large rolling mill.

A trunk factory has been started at Birmingham, Ala., by I. C. Bandman & Co.

The South Calera Land Co. have organized at Calera, Ala., with W. F. Aldrich as president; J. D. Hardy, vice-president and general manager, and George F. Moore, secretary and treasurer.

The Calera Foundry, Calera, Ala., is being enlarged.

The East Lake Land Co., Birmingham, Ala., have let the contract to build their street railroad to Patrick Sullivan, of Atlanta, Ga. Steam motors will be used as a motive power.

ARKANSAS.

The Switzer Wagon Co., Fayetteville, Ark., lately reported as incorporated, have nearly completed a three-story factory, 46x76 feet.

It is reported that a Morse cotton compress will be erected at Van Buren, Ark., by the Fowler Compress and Oil Syndicate.

The American Mining Co., St. Louis, Mo., previously reported as to erect a 40-ton smelter at their mines at Hot Springs, Ark., are receiving bids for its erection.

The E. P. Suydam Mining Co. are developing mines at Bear, Ark.

The Greenville Barrel Co., Greenville, Mich., have bought about 10,000 acres of timber lands near Dumas, Ark., and have erected a saw mill at Dumas.

A hotel is to be built at Arkansas City, Ark.

A canning factory is reported to be established at Judsonia, Ark.

W. H. Sanford & Co. have leased the Anglin Mills, 4 miles from Mountain Home, Ark., and are adding wool carding machinery.

John S. Park, Henry Rentzell, Beckwin & Rentzell and B. T. Duvall have formed a company at Fort Smith, Ark., to build an opera house. The capital stock is \$51,500.

FLORIDA.

J. C. Greeley, of Jacksonville, Fla.; A. M. Ives, S. C. Thompson, Mr. Drew and others have bought 6,000 acres of mineral lands, which they will develop.

The Gainesville & Gulf Railroad Co., (office, Gainesville, Fla.,) previously reported, have changed their name to the Gainesville, Tallahassee & Gulf Railway Co., and elected Albert L. Rice, of New York, as president; John B. Dell, vice-president; M. F. Miller, secretary, and L. A. Barnes, treasurer. The contract to build the road, which will extend from Gainesville to the Gulf of Mexico, has been let to N. R. Gruelle and associates.

Cook Carleton, M. Loeb, E. T. Lane and G. Loper Bailey, of Palatka, Fla., and M. H. Dingee, of New York, have formed a company at Palatka, Fla., to build an opera house.

Hiram Haines contemplates establishing dry docks at Pensacola, Fla.

V. J. Herlong, Clintonward, S. C., will erect a saw mill at Fort White, Fla., with a capacity of 30,000 feet daily. He will add planing machinery later on.

J. O. C. Blount, J. N. Hooker, E. E. Skipper, W. W. Clark and P. B. Blount have organized a \$10,000 stock company at Bartow, Fla., to start a brick yard. They have ordered the machinery.

GEORGIA.

C. B. Hargrove, Rome, Ga., contemplates starting a rope factory and wants to correspond with manufacturers of rope machinery.

A stone quarry has been opened at Hamlet, Ga.

Messrs. Mallett, McCandless and others will charter a company at Jackson, Ga., to build a guano factory. The capital stock will be \$20,000.

W. W. Van Ness, Dalton, Ga., lately reported as organizing a stock company to erect a smelter, writes us: "we contemplate erecting a Bessemer steel plant at this place, provided, that we can get a sufficient quantity of good iron ore."

J. E. De Vaughn and others of Montezuma, Ga., contemplate erecting a factory to manufacture axe and plow handles, whiffle trees, &c.

J. M. Brown, M. P. Maxwell, E. B. Lewis and Max Cohen contemplate organizing a company at Montezuma, Ga., to erect a cotton compress. Correspondence is desired with manufacturers of compresses.

Joseph De Golyer, Troy, N. Y., manufacturer of varnishes, is in Atlanta, Ga., prospecting with a view, it is said, to locating a branch factory.

James R. Brown, Canton, Ga., has sold 6,000 acres of iron and manganese lands to the Dade Coal Co., of Cole City, Tenn.

A. W. Archer, Canton, Ga., will purchase some machinery for his brick yard.

It is stated that the Richmond & Danville Railroad Co. (office Richmond, Va.) contemplate building a fine depot at Atlanta, Ga.

The Trowbridge Furniture Co., capital stock \$20,000, has been chartered at Atlanta, Ga., by John Trowbridge, Henry T. Trowbridge, Leonard T. Kendall and George W. Powers. Will build a factory shortly.

A. G. Howard & Co., Atlanta, Ga., have increased the capacity of their tobacco factory.

A company is being formed to build a street railroad at Dalton, Ga.

It is rumored that a company is being formed to build gas works at Dalton, Ga.

E. M. Walsh & Co., Columbus, Ga., previously reported as erecting a refrigerator, are building a vinegar factory.

The Savannah, Florida & Western Railroad Co. (office, Savannah, Ga.) will extend their road from Thomasville, Ga., to Monticello or Tallahassee, Fla., if the road bed is prepared for them and depot grounds donated. The offer will be accepted.

W. H. Warren, Augusta, Ga., contemplates organizing a stock company to build a large hotel.

The Sibley Manufacturing Co., Augusta, Ga., have ordered 36 new looms for their cotton factory.

W. A. Preston and E. H. Kingsley, of St. Joseph, Mo., reported last week as to start a sash, door and blind factory at Birmingham, Ala., have, with others, bought 1,200 acres of timber lands at Tallapoosa, Ga., and will build their mills and factory at Tallapoosa.

R. L. Bloomfield, Athens, Ga., president Athens Manufacturing Co., has bought the Barrett shoals for a Boston company, who will erect, it is stated, several large cotton mills.

The Clegg Manufacturing Co., (cotton) Columbus, Ga., will increase their capital \$50,000.

M. B. McGinley and associates, Athens, Ga., will enlarge their planing mill and wood-working factory.

KENTUCKY.

James E. White, James R. Clark, Wm. J. Ballard and Conrad Burkhauser have chartered at Covington, Ky., the Natural Gas & Mining Co., capital stock \$300,000. Its object is to bore for oil and natural gas and convey them to La Grange and Louisville.

The Common Sense Fertilizing Co., Louisville, Ky., will at once rebuild their works, reported in this issue as burned.

The Western Oil & Gas Co., capital stock \$1,200, has been incorporated at Covington, Ky., by Thomas Singleton, Alexander Montgomery, Marshall McDonald, Mr. Tupman, John P. Ernst and William Durrett.

The Free Masons, of Ashland, Ky., contemplate erecting a building to cost not less than \$25,000.

John C. Latham, Jr., and others are organizing a company at Hopkinsville, Ky., with a capital stock of \$90,000, to build about 40 miles of macadamized roads in Christian county.

The Central Bridge Co., Covington, Ky., previously reported, has been organized with John A. Williamson as president; L. R. Hawthorne, secretary, and James Collins, treasurer. The object of the company is to build a bridge from Newport to Cincinnati.

LOUISIANA.

T. J. Sullivan, Bowling Green, Ky., has leased the works of the Crescent City Sash & Manufacturing Co., New Orleans, La., and put them in operation. Has added a saw mill with a daily capacity of from 15,000 to 20,000 feet.

C. W. Georgs will erect a steam cistern factory at New Iberia, La.

John G. Lane & Son, Sibley, La., will rebuild at once their saw mill, reported last week as burned. The loss was \$5,000.

J. H. Bemiss, A. B. Miles, E. L. Bemiss, E. A. Luminais, Charles Carroll and others have incorporated at New Orleans, La., the New Orleans Publishing Co., capital stock \$15,000, to print and publish books, &c.

The Pauly Jail Building & Manufacturing Co., of St. Louis, Mo., have received the contract to build the jail at Gretna, La., previously reported. It is to cost \$12,500.

A company is being formed at Shreveport, La., to build an opera house and a merchants' exchange. More than \$22,000 has been subscribed.

Zuberier & Behan, V. & A Meyer and James A. Ware will erect a sugar mill and refinery at Dorcyville, La., to cost over \$100,000.

MARYLAND.

The Chesapeake & Potomac Telephone Co., Baltimore, will erect a large building on St. Paul street.

James H. Preston will build a new and larger canning factory at Webster, Md.

B. F. Baldwin has prepared plans for a four-story asylum, 140x168 feet, to be erected at Hampden, Md. It is to be of stone and will cost about \$60,000.

The large candy factory of Darby & Co., Baltimore, reported in this issue as burned, will be rebuilt at once.

The United States Hedge Fence Co., capital stock \$50,000, has been incorporated at Westminster, Md., to build hedge fences, with William B. Thomas as president; W. L. Seabrook, vice-president; George Batson, secretary; Charles Goodwin, treasurer, and James A. Mitchell, manager.

John T. Ensor, J. Piper, D. G. McIntosh, Charles W. Lee, L. H. Urban, S. C. Tomay and others will incorporate at Towson, Md., the Towson Water Co., capital stock \$25,000, to build the water works previously reported.

The Druid Cotton Mills Manufacturing Co., Baltimore, will spend \$50,000 in purchasing new machinery and improving their mills at Woodberry, Md.

The Glenn estate will erect a four-story brick and stone building, 54x90 feet, on St. Paul street, Baltimore. U. S. Firor has the contract.

H. Reckord & Son, Belair, Md., have added a roller corn meal mill to their roller flour mill.

Pennsylvania parties are negotiating for the purchase of timber lands about 4 miles from Rockville, Md., with a view to erecting saw mills.

George A. Blake has the contract to erect a large 3-story building on South Broadway, Baltimore.

A large hotel is to be built three miles from Rockville, Md.

MISSISSIPPI.

The Natchez Ice Co., Natchez, Miss., are overhauling their factory and putting in new machinery.

The city council of Greenville, Miss., have decided to advertise for proposals to build water works, or to arrange with some company to build them.

The Mississippi Land, Immigration, Mining & Manufacturing Co. has been organized at Durant, Miss. The authorized capital stock is said to be \$1,000,000.

NORTH CAROLINA.

The Atlantic Coast Line, Henry Walters, Wilmington, N. C., general manager, will build a branch railroad from the Pee Dee river crossing of the Wilmington, Columbia & Augusta Railroad toward Fayetteville. 20 miles will be built this year. Are about to begin work on a road projected from Sumter, S. C., to Augusta, Ga.

James D. McNeil will build a cotton yarn factory, 40x60 feet, at Fayetteville, N. C. Has purchased the necessary machinery.

The capital stock of the company reported last week as formed at Shelby, N. C., to erect a cotton factory, by A. C. Miller, R. B. Miller and others, is \$30,000.

James Keever, Daniel Keever, D. C. Keever and A. P. Keever have lately erected a saw mill and shuttle-block factory at Keeverville, N. C.

The name of the electric light company previously reported as formed at Fayetteville, N. C., by A. A. McKethan and others, is the Fayetteville Brush Electric Light & Water-Power Co. A. A. McKethan is president and H. W. Lilly, secretary. The capital stock is \$10,000.

A brickyard is being started at Southern Pines, N. C., by I. Eaglesfield.

R. M. Conch will erect a lath and shingle mill near Keyser, N. C., and wants to purchase a 25 horse-power turbine water wheel and a shingle machine.

A chair factory will be started near Gibsonville, N. C., by Clapp & Co.

Brooks & Love, Greensboro, N. C., are erecting a new and larger building for their lumber mill.

It is stated that a canning factory will be started at Fairfield, N. C., by J. T. Chalmers, T. H. Ketchum, J. Q. Davis and J. H. Cummings.

Linnahan & Co. will put steam machinery in their sandstone quarry at Wadesboro, N. C.

The Meadows Tobacco Co., Oxford, N. C., have doubled their capital and will double the capacity of their factory.

Brown & Co., Edenton, N. C., are building a mill.

The Asheville Electric Light Co., Asheville, N. C., will put in machinery for incandescent lighting.

The Wilmington Gas Co., Wilmington, N. C., are improving their works.

The incorporators of the Wilmington Street Railroad Co., Wilmington, N. C., lately reported, are Isaac Bates, J. F. Divine, A. D. Brown, F. H. Stedman, W. H. Chadbourn, John D. Bellamy, Jr., and others. The capital stock is \$25,000.

Bills have been introduced in the North Carolina legislature to incorporate the Wake County Railroad; the Asheville & Greenville (S. C.) Railroad Co.; the Murfreesboro Railroad; the Winston Land & Improvement Co., and the Cherokee Iron & Marble Co.

It is rumored that Julius A. Gray and others will build a blast furnace and an iron foundry at Greensboro, N. C.

SOUTH CAROLINA.

J. H. Cummings, Winnsboro, S. C., writes us that he will not establish a canning factory at present, as reported last week, it being too late in the season to make suitable arrangements.

W. H. & John Green, Black's, S. C., have purchased additional machinery for their lime works.

W. N. Johnson and Mr. Hill, previously reported as purchasing and to repair the Bath Paper Mill at Bath, (P. O. Langley) S. C., have, with others, organized as the Hill-Johnson Manufacturing Co. H. T. Hill is president, E. S. Hill, secretary, and Mr. Johnson, treasurer.

TENNESSEE.

John Clinton, Brownsville, Tenn., will organize a company to rebuild a cotton mill at that place.

The Tennessee Range & Manufacturing Co., Nashville, Tenn., reported last week as increasing their capital stock, will erect a large 2-story warehouse and sheet iron shop.

The Tennessee Coal, Iron & Railroad Co., Nashville, Tenn., are building 200 coke ovens at Buzzard Roost.

The report last week that the Phoenix Marble Co., Knoxville, Tenn., are enlarging their capacity, is incorrect.

J. H. Tabler, D. G. Crudup, J. B. Neely and W. G. Strubbe, of Chattanooga, Tenn., will shortly incorporate a company to bore for natural gas near Chattanooga, and Birmingham, Ala. They have leases on over 100,000 acres. The capital stock will probably be \$250,000.

James C. Warner, Nashville, Tenn., Lewis S. Colyar, Chattanooga, and John B. Bonds have chartered at Trenton, the Lookout Valley Iron & Coal Co., capital stock \$300,000, to mine for coal and iron, &c.

The Trenton Manufacturing Co., Trenton, Tenn., will put some new machinery in their cotton factory.

The Hyde's Ferry Street Railroad Co. has been chartered at Nashville, Tenn., by George W. Stockell, T. J. Harding, J. B. DeLevy, A. P. Jackson and G. L. Ellinger.

The capital stock of the Consolidation Coal & Iron Co., reported last week as chartered at Chattanooga, Tenn., is \$2,500,000. F. F. Wiehl is president; M. J. O'Brien, vice-president; John A. Hart, treasurer; F. J. Mitchell, secretary, and G. N. Leighton, general manager. The company owns about 20,000 acres of coal lands, which they will develop.

James O'Conner, T. J. Reid, N. S. Woodward, T. A. Burrier and R. N. Hood have chartered a company at Knoxville, Tenn., to build a street railroad.

F. H. Gracey, Owen & Moore, Walter Drane, D. N. Kennedy, Brice Stewart and H. C. Merritt will form a company at Clarksville, Tenn., to build a hotel to cost about \$30,000.

The capital stock of the Chattanooga & Mission Ridge Street Railroad Co., Chattanooga, Tenn., has been increased from \$30,000 to \$100,000.

It is reported that a \$150,000 company has been formed to build a charcoal furnace and chemical plant at West Point, Tenn. If true, H. M. Pierce, Nashville, can give information.

A tannery is being erected at Jellico, Tenn.

It is rumored that a stave and bent wood factory will be started at Jellico, Tenn.

Water works are to be built at Tullahoma, Tenn.

G. W. Wheland, Chattanooga, Tenn., is preparing to erect a new building for his foundry and machine works, previously reported. It will be 159x200 feet.

C. A. Lyerly, Hugh Whiteside, R. L. Watkins, M. Grant, Adolph S. Ochs and W. O. Peoples have chartered at Chattanooga, Tenn., the Chattanooga & Lookout Mountain Railway Co., to build a standard gauge railroad from Chattanooga to the Lookout Mountain property, reported last week as purchased by them.

The Bertha Zinc Co., Pulaski City, Va., have purchased a 1/2 interest in zinc and lead mines at Leadvale, Tenn. The mines will be developed and a smelting furnace may be erected.

J. M. Keen, Helenwood, Tenn., is adding some machinery to his lumber mill.

J. T. Cahill, Chattanooga, Tenn., is organizing a stock company to enlarge his iron and brass works.

A large saw mill is to be built at Charleston, Tenn.

The name of the company recently reported as chartered at Murfreesboro, Tenn., to build a street railroad is the Murfreesboro Street Railroad Co. The capital stock is \$10,000. The incorporators are J. L. McKnight, B. L. Ridley, W. M. Bell, J. M. Avery, E. P. Smith and others.

John Dill is erecting a wool carding factory and a cotton gin at Huntington, Tenn.

The capacity of the planing mill and sash factory of Dayton Manufacturing Co., Dayton, Tenn., will be increased.

[CONTINUED ON PAGE 126.]

Tub-Wheel Automatic Knife-Grinder.

We illustrate in this issue the tub-wheel automatic knife-grinder built by the Springfield Glue & Emery Wheel Co., Springfield, Mass., for grinding flat surfaces of moderate width, and all classes of long knives used on planing machines, rag-cut-

of gear without shipping any belts or stopping the wheel—a convenience in putting on or taking off the knives. It has an automatic cross feed by which both ends of the knife are fed up equally at the same time, and can be adjusted so precisely that it will grind one six-thousandth part of an inch at each traverse of the carriage, and as much more as desired, and will stop feeding and

Patent Adjustable Web Halter.

The Covert Manufacturing Co., of West Troy, N. Y., have added to their long list of harness goods a new Patent Adjustable Web Halter, shown in the accompanying cuts. This halter is easily and perfectly adjusted to fit any animal by means of the adjusting buckle on the cheek piece, rendering it par-

at the right length, and has simply to be placed on the guard hook, which is easily and quickly done in the dark and without removing mitten or glove, thus avoiding the delay straps and buckles invariably cause. Its further utility is greatly increased by attaching the combined bit and snaps, as appears in the cut, thus making it a safe, convenient and economical open bridle.

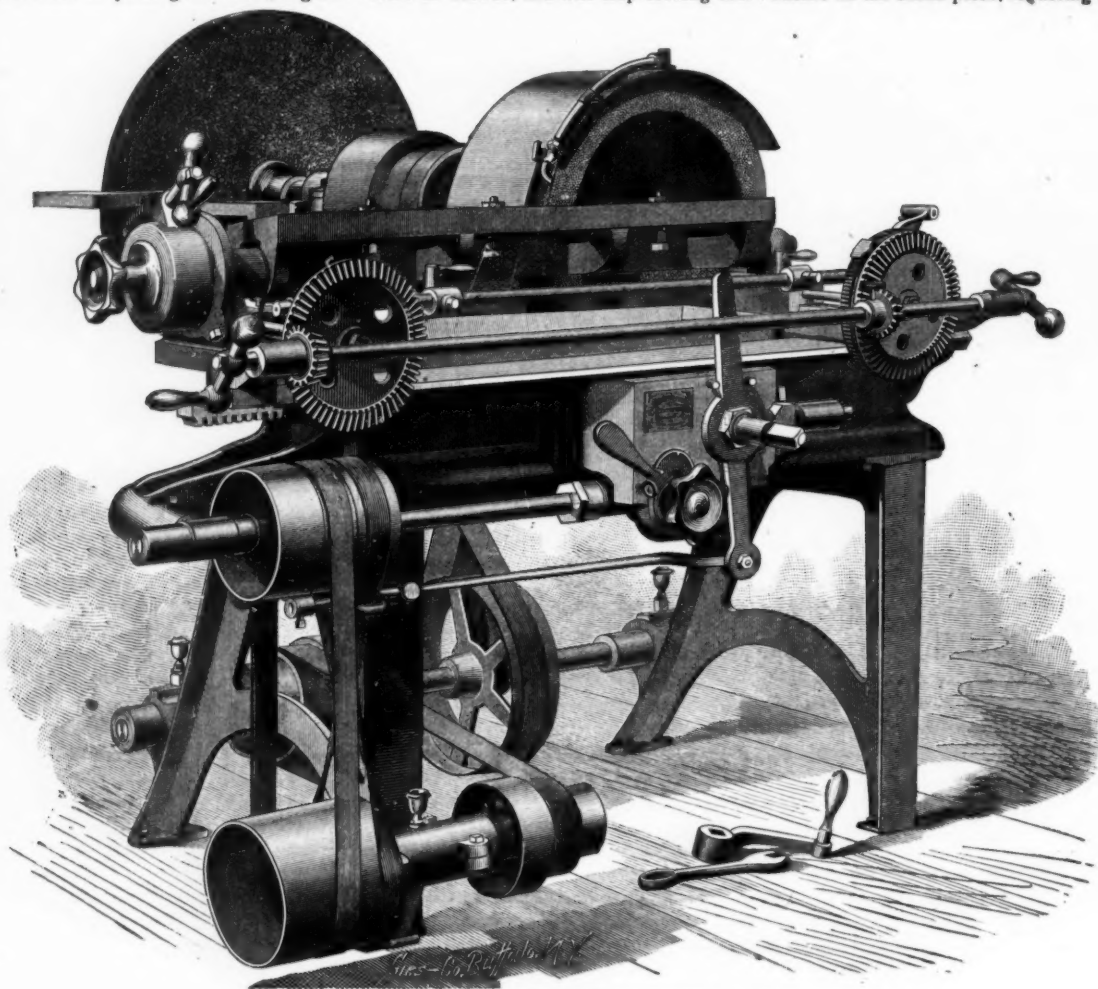
WE have frequent complaints from our subscribers that The Millstone does not come regularly. It is not our fault. The blame is in the miserable inefficiency of the present postal service. If our friends will send us word by letter, we will send extra copies until they do receive what they are entitled to.—The Millstone.

THE MANUFACTURERS' RECORD is suffering from the same trouble, and apparently every other paper in the country, judging by the constant references to the matter which we see in our exchanges. Something is certainly radically wrong in the management of the mails. Our subscribers will do us a favor if they will promptly notify us of the non-receipt of their paper, or of its being delayed beyond the proper time.

THE New Orleans Times-Democrat is to be congratulated upon its special Alabama edition. Its presentation of the development of that wonderful State and the advantages that assure its great prosperity was certainly very strong. It thoroughly covered the whole ground, and Alabama will doubtless feel the good effect of this extra edition of the Times-Democrat.

The Lumber Worker, of Cincinnati, in commenting upon the new road to be built from Anniston to Gadsden to give the former a direct connection to Cincinnati, says:

"The incorporation of the Anniston & Cincinnati Railroad Company is an event of great interest to this city, as by the execution of its designs another vast area of the South is brought into direct rail connection, and a valuable field for trade is opened up. It brings to her very doors the great iron, and coal, and timber resources of the richest section of the South; it will establish direct



TUB-WHEEL AUTOMATIC KNIFE-GRINDER.

ters, paper-trimming presses, cutter-shears, etc.

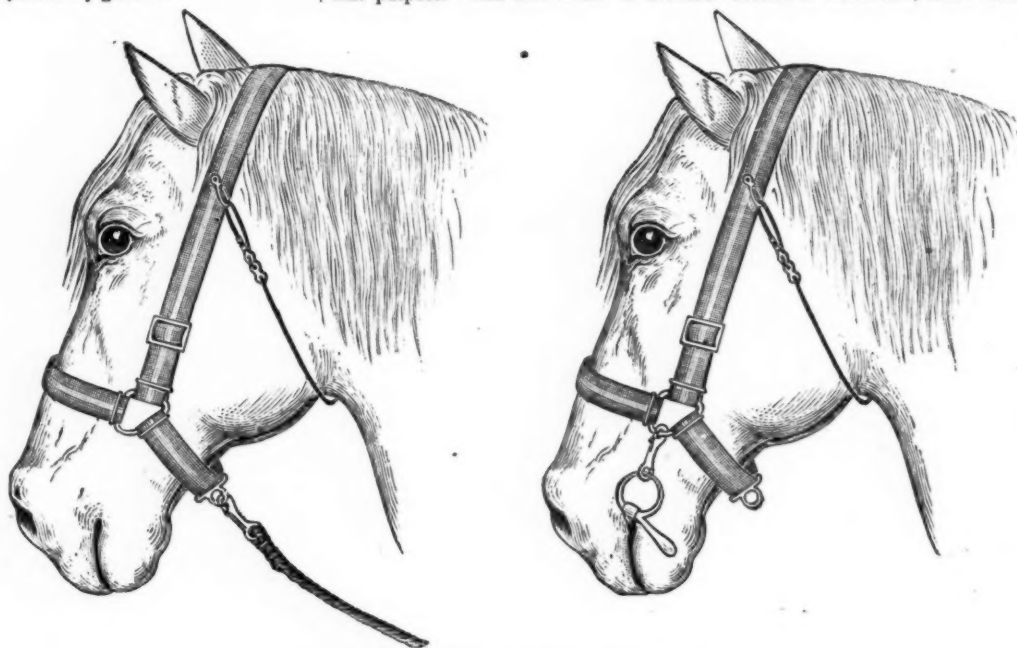
The emery wheel is 16 inches in diameter, 8½ inches deep, with a 2-inch rim, and is large for this style of wheel, being equal to one 26 inches in diameter by 1½ inch thick of the common kind. The grinding is done on the front edge or rim of the wheel, and grinds the work flat, unless the wheel is set quartering, when it grinds concave. It leaves the knife strong and ridged just back of the cutting edge, and is a great advantage where knives are used on hard work and trouble is experienced in keeping the cutting edge from nicks and breaking down. It grinds the same bevel whether the wheel is the same size or partially worn out; while on the other style of wheel the bevel changes as the wheel grows smaller in diameter.

The emery wheel is made to use water to prevent heating, drawing the temper or expanding the work, and has a hood over the wheel to prevent water flying off. This machine has galvanized pans on the carriage under the knife bar, and one in under the wheel that catches the water used and conducts it into cast-iron tanks located under the wheel out of the way. A centrifugal pump is attached to one of these tanks, piped so that plenty of water is supplied to the wheel.

Seven sizes of these machines are made, and can be furnished to do work from one inch to twelve feet long. A large wheel can be used on the back end of the spindle for dry grinding of miscellaneous work. These machines are strong, well proportioned and thoroughly made, and working parts are well protected from emery and dust. The worm and worm gear are run in an oil dish to prevent wear. The carriage can be instantly stopped by dropping the worm out

grinding at any point, so when properly adjusted and set in motion, no attendant is required—an important saving in itself. There is a graduated dial at the end of the knife bar, so that the bar can be quickly set and the knife ground at the same degree or bevel as when previously ground.

particularly desirable as well as economical. The lead ring is rigidly clamped on the chin piece, thus preventing all wear on the web. The laps are all formed with patent loop clamps, firmly and securely clamped on by machinery constructed particularly for that purpose. All clumsiness is avoided



COVERT'S PATENT ADJUSTABLE WEB HALTER.

This company guarantees all machinery sent out, and has such confidence in these machines that it will ship to responsible parties on trial, and if it does not prove as represented, they will receive it back. They make fifty-five styles and sizes of emery-wheel grinding machinery, and to any one wanting anything in this line their circular will be sent free upon application.

in its different parts, and when in use can in nowise irritate or distress the animal. It has no leather parts or connections, consequently no stitches to rip or give out. The throat latch is made of braided cord, a loop being formed by means of an adjuster, and when adjusted to fit the horse remains firmly

rail connections with Gadsden, and leaves but a short gap between this city and St. Andrew's Bay, in Florida. Our people look upon the building of this line of railroad with deep interest, realizing, as they do, the importance of such an addition to the already complete system of rail connection it already enjoys with this great and growing Southern empire."

The Clark Drying, Ventilating and Exhaust Fans.

Mr. Geo. P. Clark, of Windsor Locks, Ct., an enterprising and successful manufacturer of machinery and hardware, has been very successful in patenting many important articles, and among these are his drying, ventilating and exhaust fans, some styles of which

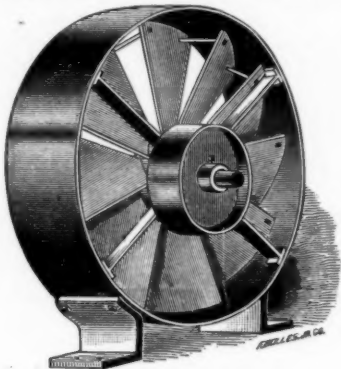


FIG. 1.—VENTILATING FAN NO. 1.

we illustrate to-day. The claims made for the Clark Fan are:

1. Strength and durability. Such parts as are subjected to strain are of great strength, but the unnecessary use of material and clumsiness in construction is avoided, making the fan light running as well as durable.
2. Effectiveness. Practical experience has led to numerous improvements in construction, and a high degree of perfection has

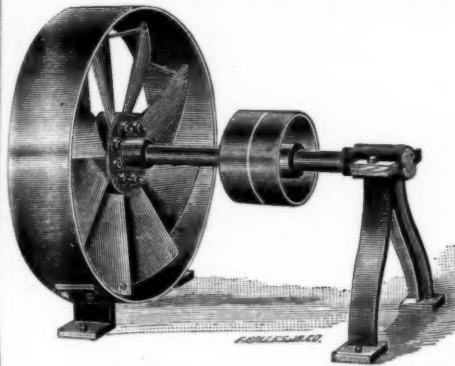


FIG. 2.—DRYING AND VENTILATING FAN NO. 3.

been attained. The manufacturer claims that these fans have no superior in capacity to handle large quantities of air in a given time.

3. Simplicity. While every effort is made to secure effectiveness, all useless curves and angles are avoided.

4. Power required. This is an important consideration. It is asserted that no effec-

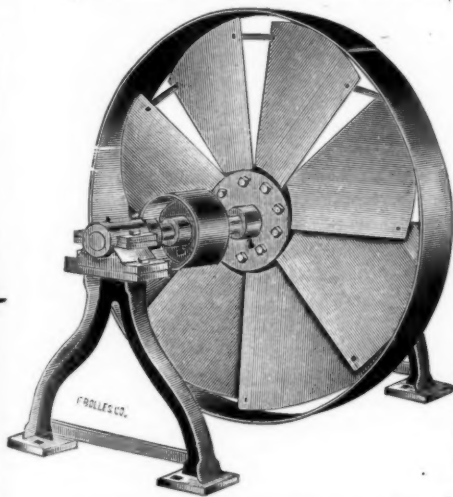


FIG. 3.—DRYING AND VENTILATING FAN NO. 5.

tive fan can be run with less power than these.

5. They are so constructed that by loosening the set screws in the wheel the shaft can be adjusted to receive driving pulley at either end.

6. No back sash. The fan blades are set securely in a solid cast iron hub, so that there is no slipping back and loss of air

through the center of the wheel, as is the case with many fans now in market.

These fans are made with different sizes of wheel, from 12 to 84 inches in diameter. They are adapted for drying wool, cotton, hair, tobacco, grain, etc., and for various other purposes in a great number of industries, such, for instance, as in bleacheries, paper mills, dye works, varnish factories, soap factories, malt houses, breweries, laundries, tanneries, glue works, chemical works, also for removing foul air from mines and ventilating theaters, hotels, restaurants and public buildings.

Three of the illustrations given herewith show prominent styles of the Clark Fan; the others indicate some methods of application.

Ventilating fan No. 1 can be placed either horizontally or vertically, and the feet shown

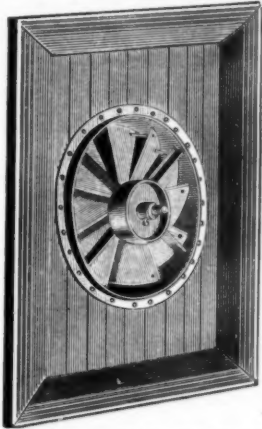


FIG. 4.—A METHOD OF VENTILATING.

in the cut can be attached overhead, on the sides of buildings and partitions, or on the floor.

Drying and ventilating fan No. 3 is very popular, and can be applied in a variety of ways, both for drying and ventilating.

Drying and ventilating fan No. 5 is made with independent rim, and is supported by two stands. It is designed for placing in walls or partitions.

Fig. 4 represents an effective and economical way of placing a Clark Fan for ventilating purposes. The fan represented is a No. 1, without feet or base; it is furnished with a flange on the outside of rim, by which it is secured in a window, in a transom, above a door, or in any other convenient wall open-

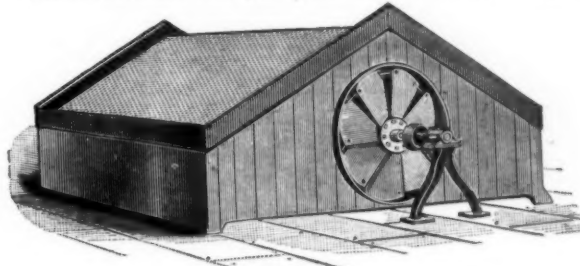


FIG. 5.—COLD AIR WOOL OR COTTON DRYER.

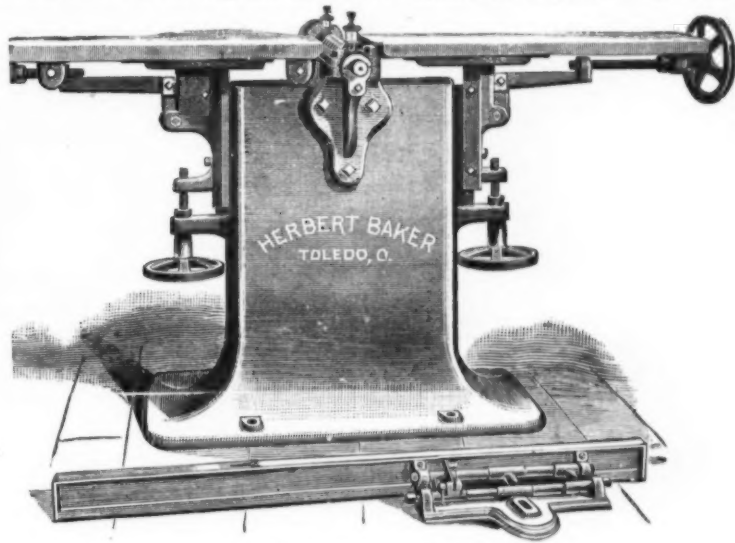
ing where a wheel can be placed perpendicularly.

Fig. 5 represents a cold air wool or cotton dryer equipped with Clark's Exhaust Fan No. 5, the sides and ends being of pine. The top consists of a sheet of galvanized iron wire with large mesh. The wool, cotton or other stock to be dried is spread loosely over it. The fan being in operation a constant current of fresh air is drawn down through the stock, passes through the fan, and, with its load of moisture, is forced through a window or other opening in the wall. The same form of dryer is equally applicable (with the auxiliary of steam pipes) as a hot air dryer, but cold air drying is less expensive and is preferred by many.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD.

Hand Planer and Jointer.

The hand planer and jointer shown in this cut is a newly designed machine, which has given great satisfaction to those who have had it in use. It has a solid lipped steel cylinder with journals 6 inches long by 1 3/8 inch diameter. Each table has a combined horizontal and lateral motion by a crank wheel movement, keeping the table always the same distance from the edges of the knives, and it has also an independent horizontal movement by means of a crank wheel for the purpose of opening or closing the throat relatively to the cutter head. The entering table is 3 feet long, and the com-



HAND PLANER AND JOINTER.

bined length of both tables is 5 1/2 feet by 13 inches wide on an 8-inch machine.

There are no taggles or links connected with these tables for the purpose of getting a combined vertical and horizontal movement, but this is accomplished in an entirely new way by means of gibbed slides. The adjustable fence is a new invention, and is firm and substantial, and sets to any angle from a square to a mitre, and can be set to work the full width of the knives. The frame or housing is made in one piece and cored, the shavings passing down through and out of the back side without clogging.

Herbert Baker, 98 Erie street, Toledo, O., the manufacturer, will furnish any further information that may be desired.

wood from Kentucky to the factory, from the factory to New Orleans, thence to Baton Rouge. He sent cotton 7,000 miles to Liverpool, paying all charges, to get money to pay for his wagon. If the factory at Baton Rouge had been sustained, the farmer would very soon have had a market at his door for such produce as he does not think of raising at present. The New Castle man who sent to Australia to buy his coals is said to be looking through a knot hole into a bankruptcy court. The merchant in New York, through whom the order was sent, and who borrowed money from a bank in Amsterdam to consummate the transaction, is said to enjoy the spectacle, but not so with the Amsterdam man.

The Picayune, in a late issue, says there can be no prosperity till the farmer gets out of debt and becomes prosperous. Prosperity must commence at the bottom. A few millionaires do not make a community prosperous. I am convinced the Picayune is looking at the situation through an inverted telescope. But a little while ago things looked differently. Of course, if the farmer owes he can't pay. But does he owe? If so, whom does he owe? These are purely abstract questions. The bank put money into the hands of its agent with orders to bleed the granger, and hand up a few pounds of the blood. In executing the order, the granger dies. Sundry other parties were necessary who must share in the proceeds and the supply fell short. The granger yields up all he had, but there was not enough to go round. How much the granger would have yielded if only 6 per cent. at a time had been demanded is purely an abstract speculation. He might have yielded many pounds in 40 years, if reasonably tapped each year. His capacity was not fairly tested.

The Picayune has contended, not that the planter, the merchant, the manufacturer and the banker were reciprocally dependent on one another, (which is a fact,) but that the merchant had ruined himself in his attempt to sustain the planter. The planter invited ruin when he staked his all on cotton. He justly claimed that breadstuffs and meats could be produced more cheaply in the West than we can produce them. The cost of conveying them from the Western farm to his plantation never entered into his calculation. The merchant was not slow to perceive the profit to himself in effecting the exchanges between these distant parties. The bank put up the funds to conduct the proceedings. None of the parties seems to have foreseen the impossibility of the planter's carrying the enormous weight. The load increased just as the planter's strength decreased, and when he stumbled and fell, he carried all with him. All the parties perceived their error when too late. The crash cannot long be delayed.

In the future factories will be planted on the spot where the material grows and where the demand for the goods exists. The farmer will have a home market for his produce; the producer and consumer will be brought close together, to reduce transportation charges and cost of exchange. Money being a convenience to effect the changes, will resume its legitimate office. No human power can avert the crash. The sooner it comes the better. No healthy growth is possible till all the parties assume their natural relations to each other.—D. C. David, in New Orleans Sugar Bowl and Farm Journal.

Home Manufactures.

Just after the war, Major S. M. Hart started a wagon and plow factory at Baton Rouge. He backed the enterprise with all the resources of his bank, the credit of which rested on a quarter of a million in real estate. He was a man who had planned and successfully carried out large enterprises. His wagons especially were pronounced by good judges to be first-class in every respect, and were put on the market at a much less price than Western wagons. The factory failed and the bank with it. The cause of the failure was this: A farmer residing within four miles of the factory not having the cash, sent to his merchant in New Orleans. The merchant, instead of honoring a draft for a home-made wagon, sent a wagon made in Racine, Wis. Wagon timber in great abundance grew (and is still growing) just outside the town.

The timber in the Racine wagon grew in Kentucky. The farmer paid freight on the

[CONTINUED FROM PAGE 123.]

It is reported that a file factory is to be established at Chattanooga, Tenn. Charles A. Lyerly can give particulars.

John McCrowell is starting a brickyard at Bristol, Tenn. He talks of building an opera house.

The name of the \$200,000 company reported last week as being formed at Chattanooga, Tenn., to purchase and operate the saw and planing mill of D. W. Hughes, will be the Hughes Planing Mill Co.

It is reported that S. S. Marshall & Bro., Allegheny City, Pa., will establish glass works at Chattanooga, Tenn.

A pottery is being erected near Pinson, Tenn., by Stewart & Alexander.

J. H. Craigmiles will build a hotel at Cleveland, Tenn.

H. C. Acuff, Decatur, Ill., will, it is said, erect a planing mill at Chattanooga, Tenn.

The North Side Street Railway Co. has been incorporated at Chattanooga, Tenn., by G. W. Thompson, S. D. Wester, G. W. Butler, C. E. Stivers, George W. Ochs, J. W. Jones and others.

W. C. Bryant, Chattanooga, Tenn., will build a hotel on Lookout mountain.

It is stated that a stove factory is to be started at Winchester, Tenn.

T. D. Craighead, Thomas F. Kendrick, Clark Pritchitt, G. M. Fogg and J. O. Milson, of Nashville, Tenn., lately reported to build a theatre to cost about \$100,000, have organized as the Hermitage Theatre Co., with Mr. Craighead as president. Plans are now being prepared.

The La Grange Furnace Co., La Grange, Tenn., are making surveys for a 6-mile railroad which they will build to Danville.

It is reported that C. B. Duncan, Rockwood, Tenn., has sold 100,000 acres of coal lands to a syndicate represented by Mr. Williams, of Atlanta, Ga.

It is reported that the Standard Gas Machine Co., of Washington, D. C., will organize a local company at Nashville, Tenn., to manufacture and sell the Bennett gas economizer.

TEXAS.

The name of the company previously reported as formed at Pilot Point, Texas, to build a roller flour mill, by R. F. Johnson, J. C. Newbury and W. S. McShaw, is the Pilot Point Roller Mill Co. The capacity will be 75 barrels daily.

The Excelsior Soap & Manufacturing Co., Dallas, Texas, reported last week as incorporated with \$50,000 capital stock, succeed Wagner, Denni & Co., whose factory they will enlarge to three times its present capacity.

The name of the company previously reported as organized at Center, Texas, to build a railroad to Tenaha, is the Sabine River Railway Co. A. Wilson Oliver is secretary, and wants to correspond with contractors or construction companies.

A sash, door and blind factory is being erected at Corsicana, Texas.

A gin factory is being built at Corsicana, Texas.

The Corsicana Electric Light Co., Corsicana, Texas, are putting in some new machinery.

The Texas Tram & Lumber Co., Beaumont, Texas, will extend their logging railroad several miles. Have purchased the rails.

The court-house previously reported to be built at Nacogdoches, Texas, will cost about \$15,000.

An \$18,000 jail is to be erected at Floresville, Texas.

H. A. Burnett and associates will build a street railroad at Sherman, Texas. Work is to begin within six months.

A jail to cost from \$15,000 to \$20,000 will be built at Henderson, Texas.

The city council of Taylor, Texas, reported last week as negotiating for the erection of gas works, will let the contract to Stein & Co., of Austin.

The flour mill of G. B. McDonald, Jefferson, Texas, has been enlarged.

The Lone Star Ice Co., Austin, Texas, have put in new machinery to increase their capacity to 40 tons daily.

The proprietors of the Fort Worth Cotton Seed Oil Mill, Fort Worth, Texas, will put their mill in operation or convert it into a large flour mill.

The St. Louis, Arkansas & Texas Railroad Co., S. W. Fordyce, St. Louis, president, announce that they will build branch roads in Texas from Chandler to Fort Worth, from Sulphur Springs to Fort Worth, from Corsicana to Hillsboro, and from Gatesville to Brownwood.

C. W. Batsel has commenced work on a street railroad at Sherman, Texas.

Bailey & Knight Bros., Calvert, Texas, will move their horse collar and mattress factory to Fort Worth. They have purchased additional machinery.

John T. Kendrick, W. D. Pearce and J. W. Spillman, of Plano, Texas, have chartered a stock company to build a 75-barrel roller flour mill. The contract for the machinery has been let to E. P. Allis, of Milwaukee, Wis.

The capital stock of the East Dallas Water Works Co., Dallas, Texas, has been increased from \$25,000 to \$50,000.

Oscar Lynch, Fort Worth, Texas, previously reported as organizing a company to manufacture cars, has secured a site for the works, and will shortly secure a charter for the company.

George H. Kalteyer, San Antonio, Texas, has leased and will develop coal mines in Medina county.

The North Dallas Railway Co., capital stock \$20,000, has been organized at Dallas, Texas, with Franklin Priest as president; John H. Cole, vice-president; W. Hunstable, secretary and treasurer, and O. P. Bowser, treasurer. Will build 4 miles of road.

The Texas & St. Louis Street Railway Construction Co., of Dallas, Texas, will receive the contract to build the Texarkana (Ark.) Street Railroad, previously reported. W. A. Disborough is secretary of the construction company.

VIRGINIA.

L. E. Savage, Kernstown, Va., has enlarged his distillery and put in new machinery at a cost of \$4,000. He will add a 25-barrel hominy mill next fall.

The capital stock of the Sully Car Seal Lock Co., Richmond, Va., has been increased from \$50,000 to \$250,000. Sol. Haas is president.

Waller P. Huff & Co., Roanoke, Va., will build a planing mill and wood-working factory.

The capital stock of the company reported last week as being formed at Roanoke, Va., to prospect for natural gas, by Waller P. Huff, Thomas Lewis and others, will be \$10,000.

It is probable that a rolling mill will be built at Pulaski City, Va., shortly after the Pulaski Iron Co's furnace, previously reported, is built. Arrangements are being made.

A. J. Ford will erect a seven-story hotel 130x163½ feet at Richmond, Va., to cost several hundred thousand dollars. He will also erect a theatre, plans for which are now being made.

The Luray Cave & Hotel Co., Luray, Va., previously reported as to spend about \$50,000 in enlarging Luray Inn, &c., have let the contract to Hoover, Hughes & Co., of Pittsburgh, Pa.

A sorghum factory is being erected at Spring Grove, Va., by Johnson & Rittenhouse,

F. J. Chapman, Salem, Va., is negotiating the sale of 21,000 acres of mineral lands along the Norfolk & Western Railroad. He states, if the lands are sold, the purchasers will erect two large furnaces at Roanoke.

Leesburg, Va., will build a hall to cost \$15,000.

A company has been formed at Lynchburg, Va., to start a broom and brush factory, with William A. Ford as president; H. P. Watts, vice-president, and W. E. Shaw, superintendent.

The Masons, of Roanoke, Va., are forming a stock company to build a temple.

The Swansea Land & Improvement Co., capital stock \$75,000, has been organized at Pulaski Station, Va., with W. A. Carpenter as president, and L. S. Caffee, vice-president. The company will build 25 houses at once.

The erection of a rolling mill at Roanoke, Va., is now being considered by F. J. Kimball, of Philadelphia, president Norfolk & Western Railroad Co., and associates.

At a meeting of the citizens of Claremont, Va., last week, W. W. Webb, T. R. Van Wirt and I. M. Aldrich were appointed to ascertain the cost of machinery for a sumac factory and a broom handle factory.

W. E. Gilliam is developing a gold mine at Sheppards, Va.

WEST VIRGINIA.

J. M. Buck is building six coke ovens at East Bank, (P. O., Hampton,) W. Va.

The Baltimore & Ohio Railroad Co. (office, Baltimore) will double-track their road from Benwood to Moundsville, W. Va.

William Bently, J. M. Senseman and E. C. Gerwig, of Parkersburg, W. Va.; W. W. Branch, Charleston, and W. A. Tschumy, Piqua, O., have incorporated at Parkersburg the Parkersburg Veneer & Panel Co., capital stock \$25,000, to manufacture lumber, veneer, panels, &c.

The Phoenix Bridge Co., Phoenixville, Pa., has received the contract to build the iron bridge across the Potomac river, at Shepherdstown, W. Va., for the Shenandoah Railroad Co., previously reported.

P. B. Dobbins, Wheeling, W. Va., is advertising for plans for a school building.

The address of Samuel A. Crozer, previously reported to open coal mines in the Flat Top coal fields in West Virginia and build 500 coke ovens, is Upland, Pa.

The New York Southern Telegraph Co., capital stock \$1,000,000, has been incorporated in New York to build telegraph lines from New York to Southern cities, by James B. Pace, John S. Wise and Thomas M. Logan, of Richmond, Va., and John G. Moore and J. G. Weaver Page, of New York.

D. A. Tompkins and Fred Oliver, of Charlotte, N. C.; Phil. D. Armour, of Chicago; Messrs. Webster and Cudahy, of Kansas City, Mo.; and Henry C. Butcher, of Philadelphia, and others, will organize a \$5,000,000 company to build cotton-seed oil mills in all the principal business centers of the South. Mr. Butcher will be president.

BURNED.

The refinery of the Union Refining Co., Montgomery, Ala.; loss, \$30,000.

The tobacco factory of Jones Bros., Nicholasville, Ky.; loss, \$2,000.

The works of the Common Sense Fertilizer Co., Louisville, Ky.; loss, \$3,500. Will be rebuilt at once.

The saw mill and gin of Hugh Rushe, in Anderson county, S. C.; loss, \$4,000.

The large five-story candy factory of Darby & Co., Baltimore; loss about \$150,000. Will be rebuilt at once.

The grist mill and gin of J. W. Naul, New Waverly, Texas; loss, \$2,000.

The saw and grist mill of Charles Cannon, Haley, Tenn., reported as destroyed by a flood.

The gin of B. F. Morehead, in Claiborne county, Miss.

The tobacco factory of James M. Carrington, South Boston, Va.; loss \$25,000.

The cooper shop of M. V. Monarch, Owensboro, Ky.; loss \$1,500.

The carriage factory of W. C. Woody, Lynchburg, Va.

The rice mill of Stewart & Ricker, New Orleans, La.; loss \$30,000.

The saw mill of Griggs & Sunmons, Bent's, (P. O., Sanford,) Fla.; loss \$1,600.

A \$2,500,000 Company to Develop 158,000 Acres of Land.

CULLMAN, ALA., Feb. 16, 1887.

Editor Manufacturers' Record:

The North Alabama Land Co. (myself included) sold all their land, about 158,000 acres and the town of Cullman respectively, all unsold lots, to a new company, which is not yet organized, consisting of New York and Montgomery capitalists and the stockholders of the late North Alabama Land Co. This company will bring immigration and settle their land, bore for minerals and open mines, build railroads, etc. The capital of the new company will be \$2,500,000.

JOHN G. CULLMAN.

Building Branch Railroads.

WILMINGTON, N. C., Feb. 24, 1887.

Editor Manufacturers' Record:

The Atlantic Coast Line is about to begin work on a line from the Pee Dee river crossing of the Wilmington, Columbia & Augusta Railroad in the direction of Fayetteville, of which 20 miles will be built this year. The line will pass within two miles of Little Rock. They are also about to begin work upon a road projected from Sumter on the Wilmington, Columbia & Augusta Railroad in the direction of Augusta, Ga.

H. WALTERS, Gen. Manager.

To Bore for Natural Gas.

CHATTANOOGA, TENN., Feb. 21, 1887.

Editors Manufacturers' Record:

Myself and associates will drill and operate for natural gas in the vicinity of Chattanooga, Tenn., and Birmingham, Ala. We have leases on over 100,000 acres. We will be incorporated next month with a capital stock of probably \$250,000. Active work in the field will begin in April next. J. H. Tabler, D. G. Crudup and J. B. Neely, of this city, are members of our syndicate.

W. G. STRUBBE.

Rope Machinery Wanted.

ROME, GA., Feb. 24, 1887.

Editor Manufacturers' Record:

Will you kindly give me the address of a manufacturer of rope machinery. I contemplate organizing a company and establishing a factory of this character here.

C. B. HARGROVE.

New Machinery.

CATLETTSBURG, KY., Feb. 24, 1887.

Editor Manufacturers' Record:

I am putting in some new machinery, consisting of a 10-foot bed engine lathe, a new boiler and engine of larger size, and a few small tools, and expect to put in more soon.

HARLAN P. WELLMAN.

Machinery Wanted.

KENANSVILLE, N. C., Feb. 23, 1887.

Editor Manufacturers' Record:

I intend to start a shuck and mattress factory 1st of October next at a point on the H. & W. R. R. I want to hear of machinery for preparing shucks for mattresses. I wish makers of such machinery would send me circulars, etc.

R. H. BROWN.

Building Railroads.

HUNTSVILLE, ALA., Feb. 23, 1887.

Editor Manufacturers' Record:

A charter has been obtained to build a railroad from this city to Birmingham, and it will undoubtedly be built. The contract for building a road from Bessemer, 12 miles below Birmingham, through Birmingham and on up through Murphree's Valley to some point on the Tennessee river, has been let to Col. J. F. B. Jackson, of Blount Springs, and is to be completed in 12 months. Huntsville will meet this road at the river, and from here the road will be built to Fayetteville and Shelbyville, Tenn., on through that State into Kentucky to tap the Cincinnati Southern. The railroad originated several years ago to run from Elora (a point on the Nashville & Chattanooga, running from Decherd to Fayetteville, Tenn.), to Huntsville is now under construction, and several hundred hands are at work, and the road must be completed by 1st of next January, but the engineer tells me the cars will be running through from Nashville to Huntsville by October.

Work has begun on the Huntsville Street Railway, and 85 yards of track was laid today. This is being built by the North Alabama Improvement Co., of this city.

The addition to the Huntsville Cotton Factory is completed, doubling its capacity, and it starts in the morning under full blast with 10,000 spindles. BEN P. HUNT.

To Build New Works.

ROME, GA., Feb. 19, 1887.

Editor Manufacturers' Record:

The Rome Foundry & Machine Works will build new foundry and machine shop this spring. The main building will be 175 x 56 feet. Will add some new tools, such as lathes, planer, shaper and drill press and some hand tools and foundry and smith-shop blower. The new works will be built principally for the manufacture of our Davis Double Turbine Water Wheel and mill machinery and heavy blast furnace work. The capacity of foundry will be sufficient to turn out castings of 15 tons weight. We will not shut down our present shop until the new works are in operation; we will then shut down old shop and move all machinery in new works, thereby losing no time. We are now building our engines and cranes for both foundry and machine shop. Will commence work on shop in about 6 weeks. Have not fully decided on a location yet, but soon will.

ROME FOUNDRY & MACHINE WORKS.

Machinery Wanted.

TALLADEGA, ALA., Feb. 28, 1887.

Editor Manufacturers' Record:

I will build a small machine shop this spring to manufacture a small machine recently patented by myself, and want price-lists and descriptive circulars of small power planers (iron), small drill press, portable forges, emery grinders, small tools and machine set screws; also water motors and coal oil engines. T. H. NANCE.

To Build a Sugar Refinery.

PLAQUEMINE, LA., Feb. 24, 1887.

Editor Manufacturers' Record:

The sugar refinery is to be built by Messrs. James A. Ware and A. Meyer, about 12 miles below this place. Their P. O. address is Dorcyville, La. CHAS. E. DUPUY.

Considering the Erection of a Rolling Mill.

PHILADELPHIA, PA., March 1, 1887.

Editor Manufacturers' Record:

The matter of the erection of a rolling mill at Roanoke, Va., is under consideration, but the matter has not yet been definitely arranged. F. J. KIMBALL.

Will Build Machine Shops.

BIRMINGHAM, ALA., Feb. 21, 1887.

Editor Manufacturers' Record:

We expect to erect a round-house and machine shops. ELYTON LAND CO.

IRONTON, O., Feb. 26, 1887.

Editor Manufacturers' Record:

Our arrangements are not fully completed, but it is probable that we will in the near future start a saw mill and planing mill in Decatur, Ala. L. M. HENRY.

CUMBERLAND, MD., Feb. 23, 1887.

Editor Manufacturers' Record:

On February 21 we were awarded the contract to erect a hospital for the insane at a cost of \$27,500. The building will consist of the center part 40 feet square, 4 stories high, and two wings 40 feet by 60 feet, each 3 stories high. The structure will be of brick, and have all the modern appliances. MERTENS' SONS.

Erecting Ice Factory and a Foundry.

TAYLOR, TEX., Feb. 26, 1887.

Editor Manufacturers' Record:

Mr. J. R. McCormick is putting up an ice factory and a foundry at this place. J. O. FRINK.

Contemplating Moving Works South.

CINCINNATI, O., Feb. 28, 1887.

Editor Manufacturers' Record:

We contemplate locating our mills and factory somewhere in the South, but have not fully decided at just what point as yet, but it will likely be Montgomery, Ala. COLEMAN & REYNOLDS, Horse Shoe Manufacturers.

Will Erect a Planing Mill.

ROANOKE, VA., Feb. 23, 1887.

Editor Manufacturers' Record:

We are going to erect a planing mill and general wood-working machine shop at once. We are organizing a joint stock company of \$10,000, to bore for natural gas and oil. We expect to bore our first well 2,500 feet deep, unless successful before we strike that depth. The amount of stock is about all taken, and we expect to commence work at quite an early date.

WALLER P. HUFF & CO.

BIRMINGHAM, ALA., Feb. 26, 1887.

Editor Manufacturers' Record:

I have plans just completed by Mr. H. Woltors, of Louisville, for a hotel in connection with my opera house. Will commence as soon as weather will permit and complete by October, 1887.

FRANK P. O'BRIEN.

Will Rebuild Candy Factory.

BALTIMORE, MD., Feb. 26, 1887.

Editor Manufacturers' Record:

Will rebuild at once. DARBY & CO.

Steam Laundry.

MORGANFIELD, KY., Feb. 26, 1887.

Editor Manufacturers' Record:

The laundry company is named the Morganfield Steam Laundry Co. An outfit has been purchased of the A. M. Dolph Co. LANHAM & RHEA.

Increased Capital Stock.

NASHVILLE, TENN., Feb. 24, 1887.

Editor Manufacturers' Record:

We have increased our capital stock and are putting up a large two-story warehouse and sheet iron shop.

TENN. RANGE & MANF. CO.

Bessemer Steel Plant Contemplated.

DALTON, GA., Feb. 26, 1887.

Editor Manufacturers' Record:

We contemplate erecting a Bessemer steel plant at this place, provided that we can get a sufficient quantity of good iron ore in this locality to justify us. At present we feel greatly encouraged, as this place seems to be located in the center of a rich field of ore. On the north we have brown hematite or manganese ore; on the east, specular hematite or spiegel ore; on the south, brown hematite and manganese; on the west, red fossiliferous iron ore. We have just succeeded in purchasing several hundred acres of manganese property in this locality. The ore seems to be in almost inexhaustible quantities, and is of a very fine grade, containing no silica, nor anything detrimental to its making the finest quality of Bessemer steel. W. W. VAN NESS, JR.

To Build a Large Hotel and a Theatre.

RICHMOND, VA., Feb. 26, 1887.

Editor Manufacturers' Record:

As soon as plans are completed I intend to start at once to build my new hotel. I have instructed my architect—Maj. B. J. Black—to spare no expense, as I want to build a hotel that will meet the requirements of the traveling public, cost what it may, that will be first-class in every particular. In other words I want this building to be the best equipped hotel in the South. I shall continue to run Ford's Hotel. In regards to my Broad Street Theatre, plans are being drawn, and on completion work will begin at once. A. J. FORD.

Saw Mill and Shuttle Block Factory.

KEEVERSVILLE, N. C., Feb. 23, 1887.

Editor Manufacturers' Record:

James Keever, Daniel Keever, D. C. Keever and Dr. A. P. Kever have erected a saw mill and a shuttle block factory. The machinery is complete and running day and night. P.

Contracted to Enlarge Luray Inn.

PHILIPSBURG, PA., Feb. 28, 1887.

Editor Manufacturers' Record:

We have contracted for and will erect addition to Luray Inn, to be ready when season opens. HOOVER, HUGHES & CO.

MONTEZUMA, GA., Feb. 26, 1887.

Editor Manufacturers' Record:

A meeting of the merchants and cotton men was held to-day for the purpose of organizing a cotton compress company. Capt. J. M. Brown, W. P. Maxwell, E. B. Lewis and Max Cohen are the leading men in the movement. Manufacturers of such machinery would do well to correspond with them. A movement is on foot to have an election for the purpose of issuing bonds to build an iron bridge across Flint river at this point, with a bright prospect of succeeding, as a majority of the people favor it.

Mr. J. E. De Vaughn, one of our leading capitalists, and others contemplate putting up a shop to manufacture hoe, ax and plow handles; also whiffle trees. Our river forest contains the finest oak, hickory, ash, beech and gum timber in the world, and the steamboats could land almost at the factory door.

To Build Street Railroad.

DECATUR, ALA., Feb. 26, 1887.

Editor Manufacturers' Record:

Our company have decided to build a horse railway in this town as soon as material can be secured.

H. G. BOND, Gen'l Manager.

Notes from North Carolina.

RALEIGH, N. C., Feb. 26, 1887.

Editor Manufacturers' Record:

R. M. Conch will erect near Keyser a mill for the purpose of manufacturing lumber, shingles, laths and other articles made from wood. He desires to purchase a second-hand 25-horse-power turbine water wheel and shingle machine.

J. B. Treadwell, from Weavertown, N. Y., will open at Mount Holley, Gaston county, a harness and saddle manufacturing establishment.

S. T. Morfett, of Southern Pines, recently from New Hampshire, is erecting a public hall and library building.

Mr. I. Eaglesfield, recently from Minnesota, is preparing to manufacture rough and pressed brick, at Southern Pines Health Resort, Moore county, on the Raleigh & Augusta Air Line Railroad. He has secured his site, and is now at work. J. T. P.

Contracted for Gas Works and an Electric Light Plant.

SHEFFIELD, ALA., Feb. 24, 1887.

Editor Manufacturers' Record:

We have contracted with the Westinghouse Electric Co. for their incandescent lights, which will be used to light our streets, manufacturing establishments, stores and dwellings. We have also contracted for fuel gas works (the Westinghouse system), to be established later on. Sheffield will keep step to the music in the march of progress.

SHEFFIELD LAND, IRON & COAL CO.

ALFRED H. MOSES, Vice-Pres. and Man.

MONTGOMERY, ALA., Feb. 26, 1887.

Editor Manufacturers' Record:

There was organized in Eufaula, Ala., on 24th inst., the Eufaula Water Co.; capital stock \$60,000. The directors are: W. L. Chambers, J. W. Dimmick, A. M. Baldwin and John D. Roquemore, of Montgomery; S. H. Dent, W. H. Alexander, E. B. Young, Eufaula; and W. D. Chapin, Birmingham. S. H. Dent, of Eufaula, is president; W. L. Chambers, vice-president; E. B. Young, secretary. The company are now boring its third artesian well, and will soon have an abundant supply of water. Bids for the pipes, engines and other machinery, and for the stand pipe will soon be asked for.

JOHN D. ROQUEMORE.

Tramway Engine Wanted.

MARSHALL, TEXAS, Feb. 26, 1887.

Editor Manufacturers' Record:

Can you put me in correspondence with some company who manufacture engines suitable for use on tramways? I want an engine to haul rock on tramway about 3 miles from quarry to railroad. There will not be very heavy grades. C. A. PRICE, Lock Box 79.

New Machinery.

WILLISTON, S. C., Feb. 23, 1887.

Editor Manufacturers' Record:

We are now engaged in setting up an entire new steam plant, with engine capacity of about 150 horse-power. New machinery has recently been added, and the mill is now fully equipped for a full line of yarns, as above stated. MAVERICK MILLS CO.

EDGAR E. SELL, Sec'y.

To Develop Phosphate Beds.

VILULA, PERRY CO., ALA., Feb. 25, 1887.

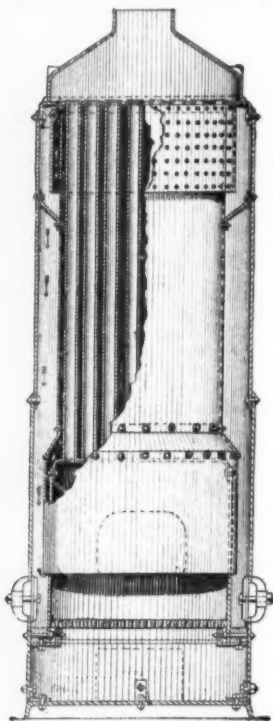
Editor Manufacturers' Record:

All the most valuable phosphate beds have been purchased, and a company will be organized under the name of Alabama Phosphate & Mining Co., for the purpose of developing and manufacturing. The same will be capitalized shortly.

RICHARD & EDRICH.

The Payne Improved Vertical Boiler.

Owing to the small space necessary for a vertical boiler, the portable form and the convenient shape, that type of boiler is an invaluable adjunct to many branches of industry. As an offset to its valuable features, the ordinary vertical boiler is liable to some vital defects. To overcome these defects and produce a more economical and efficient vertical boiler, B. W. Payne & Sons, Elmira, N. Y., have made a series of experiments which have resulted in the production of a boiler which, after thorough tests and trials, was found to give more satisfactory results than they had anticipated. In this improved vertical boiler the danger of burning the tubes and upper head and the liability of priming are, it is claimed, entirely overcome. By reference to the accompanying illustration



THE PAYNE IMPROVED VERTICAL BOILER.

tion and the following description it will be seen how these results are accomplished.

Midway between the outer tubes and the shell of the boiler is suspended a cylindrical baffle-plate—concentric with a boiler shell—which is made of No. 10 iron. This baffle-plate, or apron, as it is termed, extends from about one and one-quarter inches below the upper head to within about ten inches of the bottom of the water-leg of the boiler, and completely surrounding the tubes. Midway between this apron and the boiler shell is suspended from and joined to the upper head a perforated plate, which extends downward about twenty inches, encircling the apron. The effect produced by the apron and perforated plate is, that when the boiler is subjected to heat from its furnace

the shell near the upper head. The separation of the water and steam is thorough, as the water after passing over the apron has a downward tendency, which, with its greater weight, causes it to descend, while the steam readily passes through the perforated plate and is found in the outer space free from entrained water. It will be seen, therefore, that in this improved vertical boiler the circulation is rapid and positive. The water comes in contact with the tubes throughout their entire length, thereby increasing the heating surface nearly one-half and correspondingly increasing the power of the boiler. As a space of about ten inches intervenes between the bottom of the apron and the bottom of the water-leg, there is a portion of the water-leg which is not under the influence of the positive circulation, and which forms a receptacle for the solid matter precipitated from the water, so that the sediment, scale, etc., which is deposited, can be removed easily, as the hand-holes give easy access to the water-leg.

The boilers are adapted to all kinds of fuel, and with from six to ten inches of water over the crown-sheet there is said to be no danger of burning the tubes.

One ordinary 6 horse-power vertical boiler, supplied with the improvements just explained, was recently connected with a 10 horse-power vertical automatic engine, and, in the test which ensued, a steam pressure of 75 pounds per square inch was obtained in the boiler in twenty minutes from the time the fire was lighted. The engine was then started and the pressure raised to 100 pounds, after which the engine was run under a load of 12 horse-power for ten consecutive hours. It is said that a pressure of 100 pounds has been obtained from cold water within sixteen minutes from the time of lighting the fire.

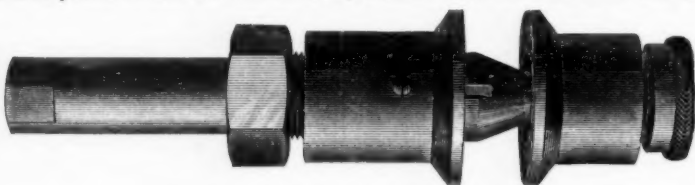
In the construction of these boilers only the best material is used. The shells are made of C. H. No. 1, and the heads of the best flange iron, all of which material is plainly stamped. All boilers are tested to 150 pounds hydrostatic pressure before shipment.

Messrs. B. W. Payne & Sons make a large and complete line of engines, portable and stationary; also a very fine high-speed automatic cut-off engine, specially adapted for electric lighting.

For further information and prices, address B. W. Payne & Sons, Box 1018, Elmira, N. Y.

Improved Patent Adjustable Mandrel for Saws, &c., &c.

The object of this invention is to do away with the annoyance of bushing loose fitting saws, where accurate and positive fit is a necessity. It also does away with the necessity for separate mandrels where there is an assortment of saws to use where the holes may vary in size, as it only requires three of these tools to take in a range from $\frac{1}{4}$ in. to 1 1-32 in. holes. Another advantage which is claimed for this mandrel is the facility



IMPROVED PATENT ADJUSTABLE MANDREL.

the water surrounding the tubes ascends and is replaced by the cold water from the space between the apron and the boiler shell. As the heat increases, the circulation around the apron becomes more rapid, the water within the apron and around the tubes being forced to and over the top of the apron where the separation of water and steam takes place; the latter passing through the perforated plate to the space between the boiler shell and that plate, and the former descending to the water contained between the apron and boiler shell. The steam is drawn from the boiler through an opening in

with which the saw may be mounted; held perfectly true and firm, it will be impossible to do otherwise, as a saw will always find a true seat in the taper of this mandrel. Each mandrel is guaranteed to give satisfaction. It is manufactured by Montgomery & Co., 105 Fulton street, New York.

We are glad to find the MANUFACTURERS' RECORD, of Baltimore, upon our table. It gives fuller and fresher information about the development of Southern industrial, mining and railroad enterprises than can elsewhere be obtained.—Gazette, Florence, Ala.

A Patent Combination Scale.

Everybody knows that unreliable scales are as useless as a watch or clock that can't be made to keep good time. We herewith present a few engravings showing a patent combination scale made by the Binghampton Scale Works, Binghampton, N. Y., which possesses many good points, besides being reliable, durable and cheap.

The manufacture of iron scales, as they are called, in their present principle and

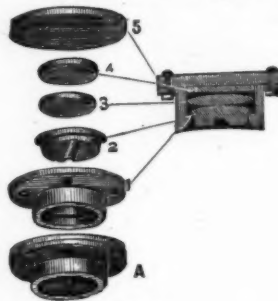


FIG. 1.

form, began about fifty years ago. Iron levers were then substituted for wood, for the purpose of more correct adjustment and security of the bearings in their proper relative positions on the levers. At that time there was no known way of attaching the necessary bearings to wood levers, and adjust them so that they could be removed, and attached to wood elsewhere and be as correct as iron levers fitted at the manufactory.

A few years proved the imperfections of iron scales. Broken levers, dulled bearings



FIG. 2.

and expensive repairs caused much dissatisfaction. Many improvements were made, but it is claimed:

1st. That the average breakage of iron lever scales for the past twenty years has been 25 cent., and the cost of replacing has been \$30 per scale. 2d. That constant use of such scales for six years has so worn and rusted the bearings that they are unreliable for accurate weighing, and that the cost of correctly repairing such scales is \$20 per scale.

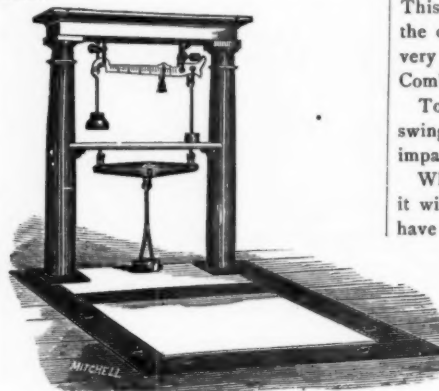


FIG. 5.

In 1874 and 1876, H. B. Osgood invented and perfected an arrangement for attaching steel bearing stirrups to wood beams, substantially and accurately for weighing purposes, so that it was no longer necessary to use or transport the heavy iron base used in scales.

Fig. 1 shows "Osgood's Patent Platform Bearings." 1, 2, 3, 4 and 5 are parts of it, which when put together for use, are represented by A. (See sectional view on the

right.) 1 is the socket. 2 is the cast iron bearing block, with a concaved grooved lower surface (to rest upon the knife edge pivot,) and a convex upper surface. 3 is a convex disc, resting on the bearing block. 4 is a rubber cushion or spring, which takes the sharp concussion of the shock, when the load strikes the platform, preventing the cutting of steel into steel. 5 is the plate which is riveted to the socket, and holds the bearing block, disc and cushion in the chamber, while allowing the bearing block to move freely in the chamber, and adjusts itself to the knife edge. The manufacturers say that these bearings combine all the advantages claimed in the "Howe Scale," and in addition, the rubber packing between the bearing blocks.

Fig. 2 represents the bearing in position on the knife edge; the socket drops below and around the knife edge, forming a guard which prevents the possibility of their sliding out of position, requiring no check-

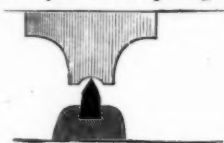


FIG. 3.

rods. There is no side friction or sliding motion on any pivot of this scale.

It is only using a "cushioned bearing," that always rests easily the entire length, that we can be sure of arresting the wear across the sensitive steel edge.

A very simple experiment will convince one of the value of this spring cushion. Lay a piece of rubber $\frac{1}{4}$ inch thick on an anvil; hold a knife-blade, back down, on the cushion, and strike the edge of the blade with a hammer. But little impression will be found on the blade. Remove the rubber and strike again, and the blade is ruined.

The condition of a worn-out scale is merely dull pivots. These sensitive knife edges, which were once sharp, and the bearing blocks which were once smooth, have scraped across and pounded into each other until, instead of coming in contact at a point as shown in Fig. 3, with nothing to oppose their quick response to the least change of weight on the platform, they have become fitted and shouldered together, as represented in Fig. 4, so that the tendency is

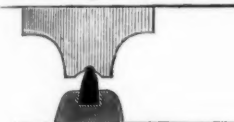


FIG. 4.

to bind and oppose any action of the lever. This is the inevitable result of use. With the old style bearings and levers it is often very quickly arrived at. With the Osgood Combination it may be avoided.

To secure accuracy, the platform must swing clear of the outside frame, so as to impart the load directly to the levers.

When a load is driven over the platform it will vibrate. In some scales the levers have not sufficient swing to allow the platform full sway, without rasping across the knife edges.

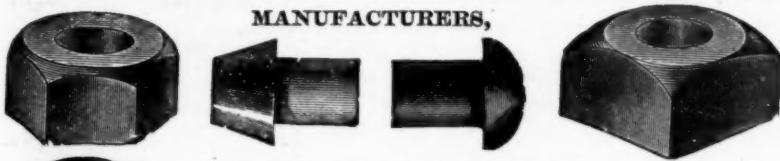
1st. The platform should have free action. 2d. The levers should have a free, pendulum-like swing, coinciding with the platform, to avoid scraping the pivots. 3d. The platform bearings should be perfectly adjusted to the

knife-edge. 4th. The cutting of the knife-edges into the bearings should be prevented.

These scales are suitable and convenient for mining purposes, grain elevators, hopper scales, (from 30 to 100 bushels); also for farmers' use, to weigh light articles, or any kind of live stock. The platforms are large enough for a stock pen, sufficient to enclose half a dozen sheep or hogs. Further information and prices will be furnished by the manufacturers upon application.

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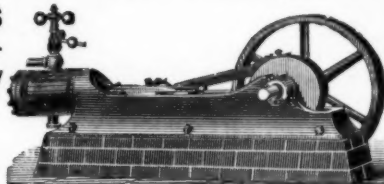
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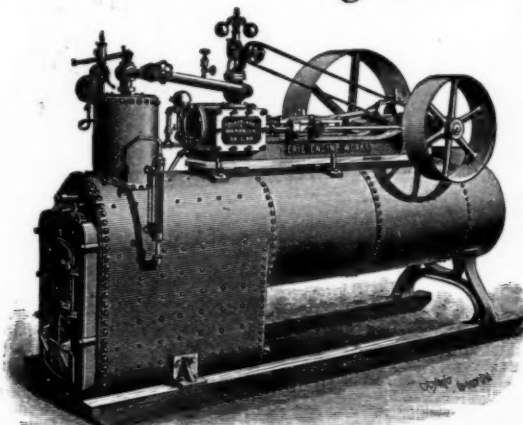
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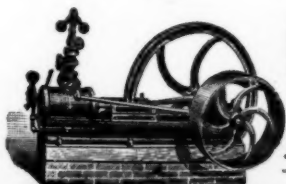
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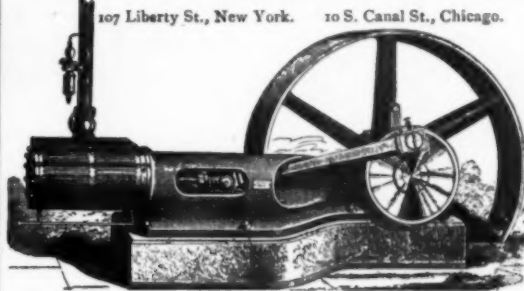
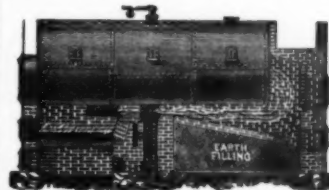
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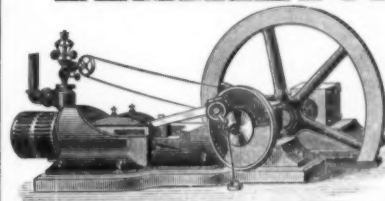
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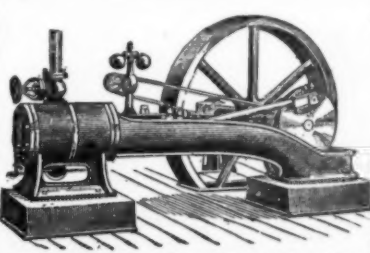
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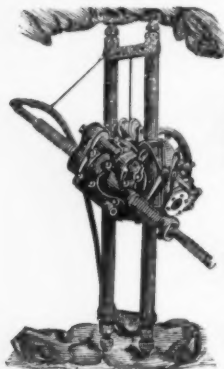
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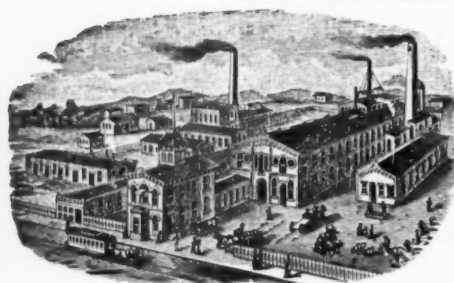
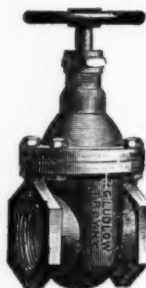
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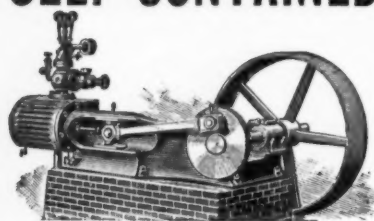
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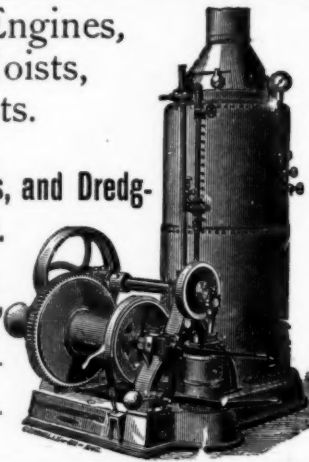
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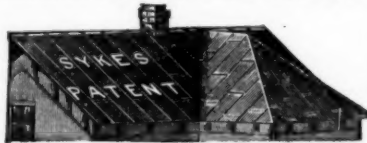
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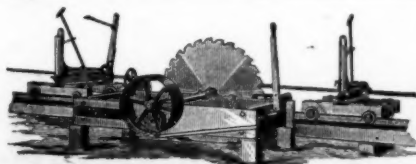
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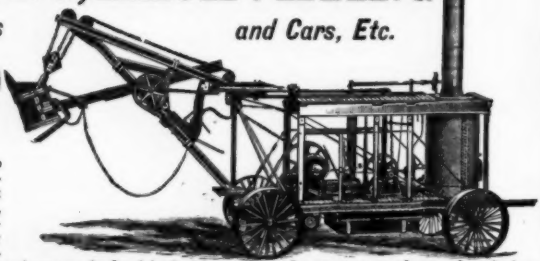
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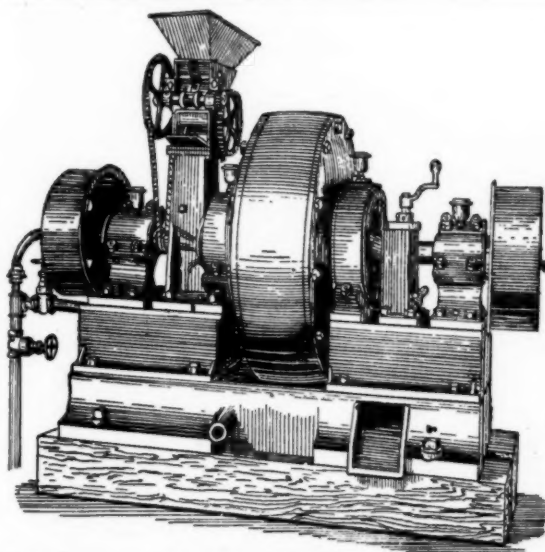
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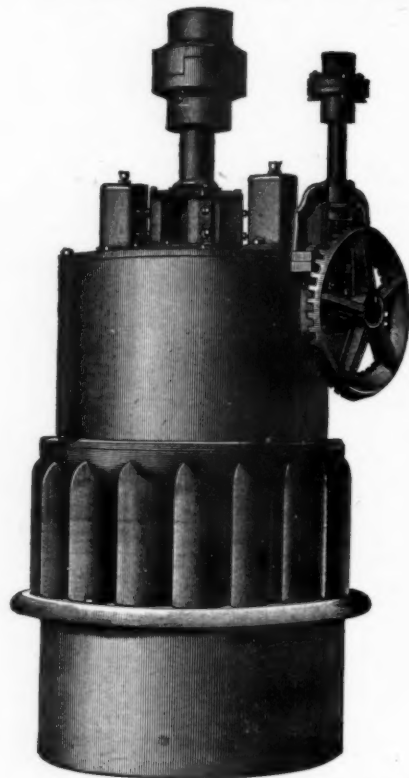
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Hercules.....	53	10,576
Boyd.....	38	5,398
American.....	10	825
Tyler.....	10	311
Hunt, Waite & Flint.....	7	375
Rifdon.....	6	440
Jonval.....	4	655
Swain.....	1	160
New American.....	1	65
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Victor.....	2	150
Total.....	133	19,030

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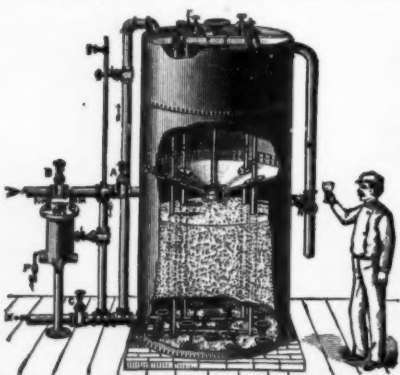
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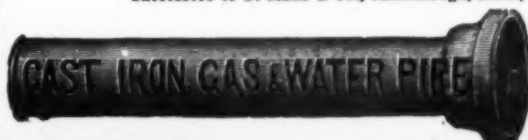
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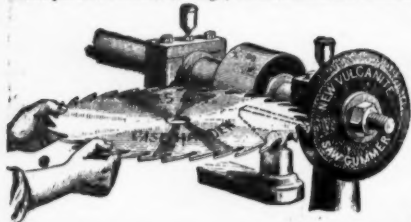
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ROOF CRESTING. IRON BALCONIES.
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BUILDERS' IRON and WIRE WORK.

Wire Cloth for Every Purpose.



SPARGER'S White Heat Steel Welding Compound.

- It is superior to borax or anything else.
- It will weld steel to steel as easily as iron is welded to iron.
- It will restore steel when burned.
- It both welds and refines at the same time.
- It never misses welding when heated hot enough.
- It does not waste away steel as does borax and other compounds.

Any tool cracked in tempering can be welded by one application, and I positively guarantee that steel will not crack after it has been worked in the compound. Testimonials of its efficacy in hand from practical machinists in New York, Pittsburgh, Newark and other cities. Sold in bulk at 5 cents a pound. Address

W. A. SPARGER, Bristol, Tenn.



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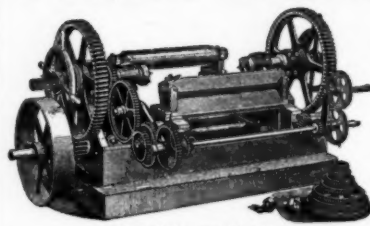
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Round Top, (for Water Works.)
Cement for Cisterns and Floors.

Salt-Glazed Sewer Pipe.
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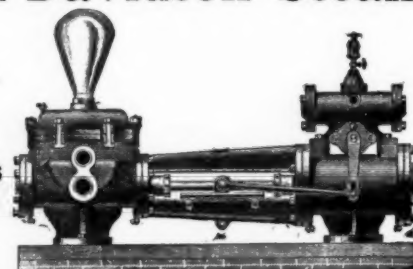
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THE M. T. Davidson Steam Pump.

Simple,
EFFICIENT,
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FOR ALL
PURPOSES
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MADE IN
ALL SIZES,
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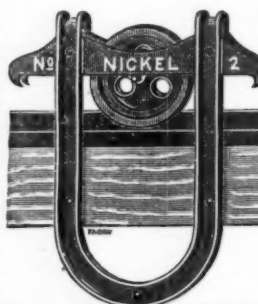
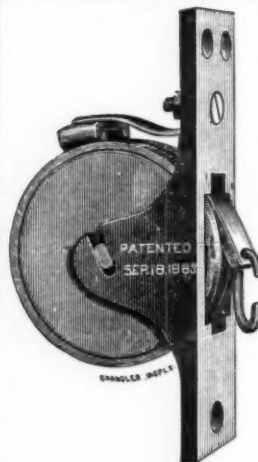
Sole Manufacturers of the

SHUMARD
Sash Balance.

NO WEIGHTS, NO CORDS, NO PULLEYS,
NO BOX FRAMES.

Balances the Sash perfectly, and runs as Easily as Weights. Easily applied to any WINDOWS, and is Simple, Durable, Reliable and Practical in Every Way.

We make many other Hardware Specialties, and mention particularly the now famous



Nickel Barn Door Hangers,

—WITH—
Ribbed Bessemer Steel Frames, Hot Bent.

Guaranteed Satisfactory to user. Send for Circulars and Prices.

COLEMAN HARDWARE CO.

(Formerly OHIO BUTT CO.)

55 Dearborn St., - **CHICAGO, ILL.**

Please mention this paper.

Look Carefully through this paper and you may find an advertisement of some machinery or other goods that you are in need of. Preserve this copy for future reference.

TRADE NOTES.

THE Western Forge & Tool Works, 1220 and 1222 Collins street, St. Louis, Mo., have gotten out a new illustrated catalogue of their railroad track tools, blacksmiths' tools, stonemasons' tools and miners' tools. Buyers of these goods will find this catalogue of interest.

THE Cambridge Roofing Co., Cambridge, Ohio, reports encouraging prospects for a large sale of their goods the coming season. There is an increased demand for their popular Crowl's Patent Roofing, which is becoming widely known. Send for their illustrated catalogue and price-list.

THE Holton Iron Roofing Co., of New Lisbon, Ohio, have issued illustrated circulars showing the various styles of their roofing, and giving many certificates of its high quality. This company wants agents in all parts of the country where they have none now, and will be glad to correspond with tinners, hardware dealers, contractors, and others who desire to handle this roofing.

THE attention of city and town authorities is called to the card of the Richmond Fire Alarm Company, which appears in another column of this paper. They manufacture and equip a new system of fire and police call boxes that are most complete, simple and reliable, and which should be generally adopted by live and progressive cities and town. An illustration of the system will soon appear in the MANUFACTURERS' RECORD, and will be both interesting and instructive.

ESPECIAL attention is called to the advertisement of the Peerless Oil Co. This company manufactures a Royal Engine Oil, which is guaranteed to have the lubricating qualities of lard and sperm oil. It is now used in many mills and factories where lard and sperm were formerly used. The Peerless Engine Oil is also a fine engine oil, and the manufacturers claim that it has no equal at its price; it is especially adapted for heavy engines and machinery, and is used extensively in flour mills. They manufacture 3 or 4 grades of cylinder oils—Peerless, Maryland and Golden—running from the cheapest to the very best. Messrs. Waite & Brennan, 425 Hughes street, Baltimore, are the agents for these oils, and they will quote prices on application.

A VERY ingenious device is the lock wedges manufactured by C. J. Grellner, 924 Locust street, St. Louis, Mo., by which axes, hatchets and hammers are so securely fastened to their handles that accidents are impossible. This wedge is made of malleable iron. One side has a half-round groove or channel terminating in an opening in the wedge. The lower side of this opening is sharply beveled. The lock piece is made of half-round wire and beveled at one end. The wedge is driven into the handle in the usual manner. The lock piece is put into the groove or channel of the wedge and driven home; as soon as the lock piece strikes the beveled part of opening it is compelled to turn through the wedge. The wedge is thus positively locked into the handle and held in place securely. A descriptive circular, showing cuts and construction, will be sent upon application. Mr. Grellner reports a growing demand for his device with the hardware trade.

EVERY steam user in the country ought to have the new catalogue issued by the Jarvis Engineering Co., proprietors of the Jarvis Patent Furnace, Boston. This furnace or system of setting steam boilers makes it possible to utilize all kinds of cheap fuel, such as screenings mixture, slack coal, wet sawdust, coke screenings, &c. It is now in use in many of the leading steam plants of the country, and is constantly receiving the very strongest endorsements. This new catalogue of 56 pages gives much information of value to every one interested in economizing fuel.

THE Lechner Manufacturing Co., of Columbus, O., have made arrangements with the Eastern Coal Machinery Co., Philadelphia, Pa., to handle their Legg patented coal mining machines and power coal drills. This machinery is well-known to all operators in coal throughout the country, which, in the past few years, by the aid of the best skill and talent, has been brought to a high degree of perfection and is being extensively adopted throughout the country, especially where coal operators are desirous of reducing the cost of production and to avoid the many annoying difficulties occasioned by strikes. With this improved machinery, the cost of mining, it is said, is reduced at least 50 per cent. It is not only labor saving, but the coal is produced in much better condition, hence has the preference in the markets. The Lechner Company has long felt the need of an Eastern office, and feel highly gratified in having made so favorable arrangements with the Eastern Coal Machinery Company, who have the sale of their machinery in Pennsylvania, Virginia, West Virginia and Maryland. This new company consists of Mr. B. A. Legg, formerly superintendent of the Lechner Manufacturing Company, and Mr. P. C. McKinlay, of New York. Both these gentlemen have had a long experience with coal mining machinery, and are fully capable of supplying the coal producers in their States with the latest improved machinery. In connection with the above, they will handle air compressors, elevators and conveyors, and a general line of machinery and supplies for coal mines. Their office is at 142 South 4th street, Philadelphia, Pa., where they will be pleased to have parties call, or correspond with them, and if changes are contemplated, will cheerfully make estimates of cost on machinery, &c. They will also examine mines and furnish machines, subject to sale after having worked on basis of estimate.

THE M. C. Bullock Manufacturing Co., of Chicago, report the following recent shipments of machinery: To James Bruce & Co., Joliet, Ill., one 3 1/2-inch quarry drill outfit; to R. E. Brownell, Thomson, Ill., one plug and feather quarry drill; to David Boyle, Chicago, one 30-ton ice machine with complete appurtenances; to Messrs. Sampson, Paddock & Co., Ashland, Wis., one little Champion diamond drill, with a complete prospecting outfit; to the Spring Valley Coal Co., Spring Valley, Ill., two coal-cutting drills; to the Minnesota Granite Co., Duluth, Minn., one 4 1/2-inch quarry drill outfit; to J. C. Dunlap, Menasha, Wis., one quarry drill outfit; to the Goss Printing Press Co., Chicago, one 4-page perfecting press; to R. E. Brownell & Co., Thomson, Ill., one little Champion diamond drill, with a complete prospecting outfit.

THE Babcock & Wilcox Co. made the following sales of boilers during February: Wise Bros., Baltimore, Md., 102 horse-power; Lickdale Iron Co., Lickdale, Pa., 450 horse-power; J. & R. Meily, iron masters, Lebanon, Pa., 208 horse-power; Forest City Sugar Refinery, Portland, Me., (2d order,) 140 horse-power; Columbia Rolling Mills, Watts, Pa., 136 horse-power; Mahoning Rolling Mill Co., Danville, Pa., 125 horse-power; Arlington Mills, Lawrence, Mass., 2,880 horse-power; Gordon, Stroeble & Laureau, Philadelphia, (3d order,) 45 horse-power; The Alabama & Tennessee Coal & Iron Co., 1,872 horse-power; Frederic Probst & Co., New York City, (5th order,) 82 horse-power; Judson Manufacturing Co., San Francisco, (2d order,) 292 horse-power; making a total of 6,332 horse-power.

THE boring of artesian wells has become such an industry in the South that information on this subject is of value. The Western Forge & Tool Works, of St. Louis, have just issued a 30-page catalogue, illustrating and describing their well-drilling machinery and tools, and giving full directions for using them. This catalogue will be sent free upon application.

MESSRS. WRIGHT, ADAMS & Co., of Quincy, Ill., manufacturers of Automatic cut-off engines, etc., write us under date of Feb. 26: "We are well pleased so far with the benefit we have good reason to believe the advertisement in your paper has produced us. We are having inquiries concerning our engine from territory where before we were unknown. And the only privilege we ask for our Automatic cut-off engine is the opportunity of presenting its merits, relying confidentially that wherever they are understood, the engine will be appreciated.

Our business is at least 50 per cent. better than it was at this time last year, and the prospects are even still better. Beside our regular engine trade we are just finishing a double hoisting engine of unique design and construction, for the use of L. W. Lewis, Esq., stone contractor, Kansas City, Mo. It would afford us great pleasure to send particulars of this engine, &c., to any parties interested. We also manufacture the Bunkop single plug-tobacco machine, the best machine for its purpose in the world, and is found indispensable in every large factory. The demand for them is unusually large at present, consequently we are behind in filling orders, but, with our additional facilities and our force has been largely increased, we shall soon be able to fill all orders promptly."

W. P. MYER, 25 and 27 East South street, Indianapolis, is erecting a fine spacious building, his business having outgrown the old building where the site of the new is to be. The new factory will be fitted with new tools and the latest appliances for the manufacture of his justly popular Centennial water cut-off for cisterns, patent elevator buckets and other specialties. See his advertisement in another column.

Literary Notes.

THE public are already aware of the death of Professor Edward L. Youmans, the distinguished founder, and, till his lamented decease, the senior editor of "The Popular Science Monthly." This event will involve no material change in the management or character of the magazine. Dr. W. J. Youmans, brother of Professor Youmans, beginning with the first number of the "Monthly," has been associated in the editorial supervision during its entire life; has shared in the shaping of its policy, had a hand in the execution of the work, and for months at a time, especially during the past two years of the practical disability of his brother, has borne the substantial burden of editorial responsibility. Feeling assured that the interests of the magazine will be well cared for, and its high standard maintained in his hands, the publishers take pleasure in announcing that he will continue its management; and that it will be marked, as heretofore, by broad views of science and adaptation to the wants of the general reader.

THE ELECTRICAL WORLD continues to make rapid strides, in keeping with the progress of electricity. When started 13 years ago it consisted of four small pages, and was published twice a month. It is now issued weekly, and its size is never less than 28 large pages. Occasionally it runs up to 36 and even higher. The issue containing the report of the recent Electric Light Convention consisted of no fewer than 48 pages, and was the largest number of an electrical journal that has ever been published.

A BOOK to delight the heart of every man who loves the water, is "Yachts and Yachting," with a history of American Yachting by Capt. R. F. Coffin; a graphic account of the Mayflower and Galatea races of 1886, by C. E. Clay; a vigorous account of American Steam Yachting by E. S. Jaffray, late owner of the "Stranger," and an account of British Yachting, by C. J. C. McAlister. The book is fully and carefully illustrated by Fred. S. Cozens and others, and will receive a warm welcome wherever a life on the ocean wave is appreciated.

AMONG the contents for Scribner's Magazine for March are: Portrait of M. Thiers. The Stability of the Earth, by N. S. Shaler, with illustrations drawn by E. J. Meeker, J. Steeple Davis, A. M. Turner, Geo. Gibson, and C. E. Robinson, from photographs and diagrams furnished by the author. Aunt Fountain's Prisoner, by Joel Chandler Harris. Reminiscences of the Siege and Commune of Paris, third paper, by E. B. Washburne, ex-Minister to France. Seth's Brother's Wife, by Harold Frederic. The Story of a New York House, III, by H. C. Bunner. An Interlude, by R. Armytage. The Bayeux Tapestry, by Edward J. Lowell, with illustrations from photographs of the tapestry. The Residuary Legatee; or, The Posthumous Jest of the late John Austin, part second—the codicil—by "J. S. of Dale." Ballade of the Penitents, by Andrew Lang. What is an Instinct? by William James. Father Andrei; the Story of a Russian Priest, by Robert Gordon Butler. "Cordon!" by T. R. Sullivan.

"THE ROMANCE OF INVENTION," a book just about to leave the press of Cassell & Co., is as fascinating as a fairy tale, yet every word of it is true. The story of the many inventions that have electrified the world are here set forth, robbed of their often wearisome technicalities, and are laid before the reader in their most attractive form. Mr. James Burnley, the author, has worked laboriously to accomplish his object, and he has met with signal success.

List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date Feb. 22, 1889. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Ainsworth, P. H., Caney, Texas. Wire-stretcher.....	358,138
Allen, F. H., New River, La. Inkstand.....	358,244
Betten, J. C., Eureka Springs, Ark. Fire-escape.....	358,104
Burton, W. L., Richmond, Va. Safety attachment for pocket-books.....	358,380
Cary, Alecia C., Apopka, Fla. Cover for cooking vessels.....	358,333
Crowdus, W. A., and H. M. Sutton, Dallas, Texas. Electric-arc lamp.....	358,145
Davis, A. G., Baltimore, Md. Electric push-button.....	358,109
Dodge, C. G., Jr., Baltimore, Md. Bung.....	358,387
Gause, J. E., Brownsville, Tenn. Watch-rack.....	358,193
Goodwynne, R. M., Forsyth, Ga. Water-elevator.....	358,158
Griffith, R. W., Baltimore, Md. Burial-case.....	358,347
Grigsby, L. Z., Minden, La. Power-wheel.....	358,263
Hartis, D. W., and J. L. Rea, Charlotte, N. C. Combined disk-harrow and seeder.....	358,353
Hopkins, C. B., Louisville, Ky. Money-changer.....	358,270
Johnston, J. C., Douglasville, Ga. Cotton-picking machine.....	358,273
Lea, J. H., Charlie, Texas. Wire splicer and stretcher.....	358,044
McChallum, W. R., Wacider, Texas. Ant-trap.....	358,212
Moore, T. W., Fruit Cove, Fla. Pavement.....	358,288
Morris, S. C., Baltimore, Md. Soldering-machine.....	358,163
Nurnberger, Joseph, Charleston, W. Va. Automatic boiler gauge and alarm.....	358,289
Paris, P. G., Columbia, S. C. Fire-escape.....	358,293
Radford, S. H., Hartsell's, Ala. Sash-balance.....	358,070
Rockwell, E. D., Jacksonville, Fla. Sash-fastener.....	358,409
Ryan, J. J., Sardis, Miss. Vehicle-pole.....	358,168
Simpson, J. S., Austin, Texas. Device for cleaning gun-barrels, flues, &c.....	358,304
Smith, Bryant, and H. C. Jenkins, Brownsville, Ala. Fertilizer-distributor.....	358,171
Spies, E. F. M., Baltimore, Md. Bib.....	358,367
Sumerwell, E. K., Covington, Ky. Vessel for heating or cooking fruit, milk, &c.....	358,285
Summers, L. P., Ormond, Fla. Electrical door-opener.....	358,417
Webb, J. G., Lone Cedar, W. Va. Seed-planter.....	358,311
Whitehurst, R. W., Norfolk, Va. Dry-goods displayer.....	358,418
Williams, D. J., Hampton, Ark. Harrow and cultivator.....	358,096
Worley, J. J., J. K. Robinson and J. Hillis, Aurora, Ark. Rake.....	358,137

A. P. THAYER,
Solicitor of U. S. and Foreign
PATENTS,
No. 86 Astor House, New York,
Experience of Over 20 Years.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, }
BALTIMORE, March 2, 1887. }

Trade indications throughout the country are very favorable. In the South the great activity in industrial matters has stimulated other branches of business, and that section is now developing more rapidly than ever before, with prospects favorable for its enjoying unprecedented prosperity. Real estate is coming more and more into demand, and with the tide of immigration turned southwards, millions of acres of hitherto unproductive land will soon be improved. The increase in industrial interests will enable Southern farmers to devote more attention to diversified agriculture, and thus the prosperity and development of the manufacturing and mining industries will react on the farmers and bring to them a new prosperity. The outlook for the South's future is indeed bright.

In manufactures generally, North, West and South, business is steadily improving.

The local market for manufactured iron continues active, with prices strong as last quoted. We quote as follows, viz:

Ref. Bar Iron, 1 to 6 3/4 to 1.....	2.30 @ 2.50c
" " 1 to 4 1/2 to 1.....	2.30 @ 2.50c
" " 1/2 to 2, round and	
square.....	2.60 @ 3 c
Hoop Iron, 1 1/4 wide and upward.....	2.60 @ 3 c
Band Iron, from 1 1/4 to 6 in. wide.....	2.50 @ 2 1/2 c
Horseshoe Iron.....	3 @ 3 1/2 c
Norway Nail Rods.....	4 1/2 @ 5 1/2 c
Black Diamond Cast Steel.....	8 1/2 @ 10 c
Machinery Steel.....	3 @ 4 1/2 c
Spring Steel.....	3 1/2 @ 4 c
Common Horse Nails.....	8 @ 9 c
Railroad Spikes, 5/8 x 16.....	2 1/2 @ 3 c
Steel Boiler Plate.....	3 1/2 @ 3 3/4 c
Iron Boiler Plate.....	2 1/2 @ 4 c
Boiler Tubes.....	4 1/2 @ 5 off list

The pig iron market is somewhat quiet, with consumers less eager to make purchases, the belief having become general that prices were forced up too high by rapid buying, thus opening our markets to foreign iron. Old rails are quoted 50 cents a ton lower. We revise quotations as follows:

Baltimore Charcoal Wheel Iron (all	
Baltimore ore).....	28 00 @ 29 00
Virginia C. B. Charcoal Wheel Iron.....	27 00 @ 29 00
Anthraxite, No. 1.....	21 00 @ 23 00
" " 2.....	19 00 @ 21 00
" " 3.....	17 00 @ 19 00
" Mottled and White.....	14 00 @ 15 00
Old Rails.....	23 50 @ 24 50
Old Steel Rails.....	22 50 @ 23 00
No. 1 Wrought Scrap.....	23 00 @ 24 00
Old Car Wheels.....	17 50 @ 18 50

HARDWARE.

The market remains unchanged. Orders are coming in from the South freely and the travelers write encouragingly. The trade have become assured of the permanency of present prices for this season and are expecting a healthy business. Reports from the West are also encouraging. The higher prices being paid for labor have had a good effect and dealers in manufacturing districts are now reaping the benefit. There are no changes in price to report.

Nails are still quoted at \$2.40 @ \$2.40.

Philadelphia Iron Market.

PHILADELPHIA, March 1, 1887.

The sales of No. 1 foundry this week have been made at lower prices than a week ago; namely, at \$21.50 to \$22. The iron sold was not quite so good as the best. Foundry iron of all kinds will be in good demand because the production is not in excess of the calculated requirements. All the strong companies are filling orders and declining to sell farther ahead, excepting at full prices. The improvement is likely to bring the prices of some of the lower brands of iron up. Forge iron quotations run from \$19 to \$19.50, with four or five inferior brands at as much as a dollar below this. Bessemer pig would sell much more rapidly but for the refusal of brokers to shade prices. A 10,000 ton lot sold at \$21. Plenty business could be done at \$20.50 and \$20.75. Steel rails are quiet and it may be two or three weeks before heavy sales will be recorded. There are several reasons for

this. The principal one is that rail makers are unwilling to make the slightest concessions for even large lots. The brokers are very busy endeavoring to close contracts for old rails, scrap of all kinds and all kinds of foreign material, especially steel rail blooms. Some of them have offers at \$29 to \$30, but are unable to deliver under \$30.50. Our reports from the sheet, plate and bar mills show that the volume of business is kept up at the fullest point. We hear rumors to-day of a probable advance of bar iron in Eastern and Western Pennsylvania. There are also negotiations in progress for large quantities of structural iron and plate. The representatives of those interests in this city have a very large amount of business under their eye, and while they are reticent as to details, they are free to say in a general way that business for the next six weeks in structural and plate will be heavy. The plate iron quotations are 2 50; angles 2 25; combination prices 3.30. The demand for skelp is as it has been for months beyond the producing capacity. Muck bar sold to-day at \$35.50. There are rumors on the street of the probability of exceptionally large transactions of material, home and foreign. The influx of orders for railroad, bridge building and pipe laying requirements is helping to impart strength to the market. Brokers intimate that there are surprises in store this month, but what they are outsiders are left to guess. The bottom of the matter is there are a great many inquiries in and coming in, and if holders reduce prices a little much business is probable.

Cincinnati Iron Market Report

Specially reported by E. L. HARPER & Co.

CINCINNATI, February 28, 1887.

The market has been very quiet the past week and but few sales have been made. This, however, has not had a tendency to weaken the market in the least. The market is as firm to-day as at any time since the advance commenced. Trade as well as mankind finds it quite necessary to take a rest, and this period has been reached in trade, but it will be of only short duration. Thirty days will bring many of the large consumers in the market, especially for mill grades, of which there is only light stocks. The demand for bar iron still continues and many orders are being booked at good figures. The market for old rails is somewhat weaker, some lots having been sold at \$27, f. o. b. cars here. Old wheels are still in active demand at from \$21.50 to \$22 cash on cars here. We quote for cash on cars or wharf here:

FOUNDRY.	
Hanging Rock Charcoal, No. 1.....	23 50 @ 24 00
" " 2.....	22 50 @ 23 50
Southern Charcoal, " 1.....	24 50 @ 25 50
" " 2.....	23 50 @ 24 50
Strong Neutral Coke, " 1.....	22 50 @ 23 00
" " 2.....	21 50 @ 22 50
American Scotch, " 1.....	20 00 @ 21 00
GRAY FORGE.	
Virginia Neutral Coke.....	19 50 @ 20 50
Cold Short.....	19 00 @ 19 50
CAR WHEEL AND MALLEABLE.	
Hanging Rock, strictly cold blast.....	27 00 @ 28 00
Hanging Rock, strictly warm blast.....	23 00 @ 26 00
"Cranberry," N. Carolina warm blast.....	— @ 26 00
Amherst and Virginia warm blast.....	25 00 @ 26 00
Lake Superior Charcoal, all grades.....	26 00 @ 27 00

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, February 28, 1887.

There has been a slow, steady increase in demand for pig iron the past week. Enquiries come mainly for small lots for immediate delivery, and while leading furnaces are off the market for early delivery, sufficient iron is found somewhere to supply all demands. Dealers report a few enquiries for large lots for forward delivery, and one or two sales of this kind have been made since last report. Prices remain firm all along the line, except for an occasional "off" lot. In the line of Ohio softeners figures are easily 50 cents higher than a month ago, and it is with great difficulty that buyers can get any of this class of iron. Leading makers and dealers do not want to see any further advance in prices, but a renewal of

active demand might force them higher. There are some large enquiries for Bessemer iron in the market, and one considerable sale is reported in the West. Foundries and mills are all very busy. One firm building furnaces in the South has recently distributed 800 tons of work among Cincinnati foundries. Southern freights advance 35 cents per ton more March 1st. Official reports to February 1st, just received, show but 7 days' supply of foundry and mill iron on hand at furnaces in West and South—the lowest stocks ever recorded. We quote cash on cars at Cincinnati:

HOT-BLAST FOUNDRY.	
Ohio and Southern Strong Coke No. 1.....	21 50 @ 22 00
" " 2.....	21 00 @ 21 50
" " 3.....	20 00 @ 21 00
Ohio Soft Stonecoal, No. 1.....	21 00 @ 22 00
Ohio Soft Stonecoal, No. 2.....	20 00 @ 21 00
Mahoning and Shenango Valley Coke, No. 1.....	23 00 @ 24 00
Hanging Rock Charcoal No. 1.....	23 00 @ 26 00
" " 2.....	24 00 @ 24 50
Tennessee & Alabama Charcoal No. 1.....	23 00 @ 23 00
" " 2.....	21 00 @ 22 00
FORGE.	
Strong Neutral Coke.....	20 00 @ 20 50
Mottled ".....	19 00 @ 19 50
Cold Shortings.....	19 00 @ 19 50
CAR WHEEL AND MALLEABLE.	
Southern Car-Wheel Iron.....	26 00 @ 28 00
Hanging Rock Cold Blast, No. 1.....	27 00 @ 28 00
Hanging Rock Cold Blast, No. 2.....	24 00 @ 25 00
Lake Superior Malleable.....	27 00 @ 28 00

Louisville Iron Market.

Specially reported by GEO. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., February 28, 1887.

There has been considerable inquiry this week for small lots of iron for immediate delivery. Some furnaces have accumulated odd lots of certain grades for which they ask shipping instructions. Prices generally remain firm and fewer concessions have been made to buyers than they had expected. Wheel irons are notably scarce and we anticipate a demand in excess of the supply in the near future. We quote for cash as below:

FIG IRON.	
Southern Coke, No. 1 Foundry.....	21 50 @ 22 00
" " 2.....	20 50 @ 21 00
" " 3.....	20 00 @ 20 50
Hanging Rock Coke, No. 1 Foundry.....	21 00 @ 21 50
Southern Charcoal, No. 1 Foundry.....	22 00 @ 23 00
Silver Gray, different grades.....	20 00 @ 20 50
Southern Coke, No. 1 Mill, Neutral.....	19 50 @ 20 00
" " 2.....	19 50 @ 20 00
" " 3.....	19 00 @ 19 50
Southern Charcoal, No. 1 Mill.....	20 50 @ 21 00
White and Mottled, different grades.....	17 50 @ 18 50
Southern Car Wheel standard brands.....	26 00 @ 27 00
" other brands.....	24 00 @ 25 00
Hanging Rock Cold Blast.....	27 00 @ 28 00
" Warm.....	23 00 @ 24 00

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., February 28, 1887.

Bar iron is held very firmly, and while there are constant threats of advance in the card, yet it seems doubtful if these be realized unless the demand should be more imperative than at present.

Hoops and bands are selling in a moderate way. There is no cutting on the card recently established by the makers.

Sheet is very firm for all gauges, both light and heavy.

Nails.—We take it but that few sales have been effected at the last advance, hence there was no attempt made to put up the price further at the meeting this week, though it had been freely predicted that an advance would be made.

Wire.—Plain wire is notably firm. No concessions are offering, nor does there seem to be any stocks worth speaking of in second hands. It is, indeed, stronger relatively than bar wire, which thus far has failed to respond in a good measure to the market.

Chicago Iron Market.

Specially reported by ROGERS, BROWN & Co. W. W. BACKMAN, Resident Agent.

CHICAGO, February 28, 1887.

The market continues to show a fair degree of activity, inquiries being rather more frequent than a week ago. Some good sized orders have been placed, and one or two speculative lots of Southern iron have changed hands at less than regular prices. Notwithstanding this, prices are very firm all along the line, and in some particular grades, like Ohio softeners, still higher fig-

ures are paid. Lake Superior charcoal irons are in good demand, and are slowly gathering in consequence of short supply. The consumption of this class of material is increased 50 per cent., it is estimated, as compared with a year ago. A careful review of the Lake Superior district indicates that there will be some increase in production the coming summer, but, as near as can be arrived at, the increase will not amount to more than 10 or 15 per cent. The makers of this class of iron therefore feel very well satisfied with the future. Old wheels are scarce and still higher in price, and car wheel irons are also in good request. There is not much demand for mill irons for forge purposes in this market. We make no change in our quotations, which are for cash f. o. b. Chicago:

COKE AND STONE COAL FOUNDRY.	
Ohio (Hanging Rock) Softeners No. 1.....	23 00 @ 24 00
" Blackband ".....	23 00 @ 24 00
" Jackson county ".....	22 50 @ 23 50
" Lake ore and cinder ".....	22 50 @ 23 50
Southern Coke, No. 2.....	22 50 @ 23 00
" No. 3.....	— @ —
CHARCOAL FOUNDRY.	
Lake Superior.....	24 50 @ 26 00
Southern.....	24 00 @ 25 00
Hanging Rock.....	24 50 @ 25 50
CAR WHEEL AND MALLEABLE.	
Lake Superior.....	24 50 @ 26 00
Standard Southern.....	26 00 @ 27 50
Hanging Rock, cold blast.....	28 50 @ 30 50
" warm blast.....	24 50 @ 25 50
OLD MATERIALS.	
Old Rail, American.....	25 00 @ 26 00
Old Wheels.....	23 00 @ 23 50

Chattanooga Iron Market.

Specially reported by LOWE & TUCKER, Brokers and Commission.

CHATTANOOGA, TENN., Feb. 28, 1887.

Business of all kinds is progressing in the same active manner that has characterized it for the past three months, and from the magnitude of the undertakings that are now under way, the prospects are that there will be no let up during the present year. Nearly all the new furnace plants that have been spoken of are assuming such shape in the way of commencements that would almost be a guarantee of their early completion, and the same may be said of the new railroad lines. Prices of pig iron remain undisturbed, and inquiries and desires to contract for future delivery would indicate that the consumption will keep well up with the production; at least the furnaces are feeling no concern as to the destination of their year's output. The hardware trade is very active and merchants are having their hands full in filling orders.

St. Louis Iron Market.

Specially reported by ROGERS, BROWN & Co., Gay Building, 204 N. 3rd street, St. Louis. W. H. SHIELDS, Manager.

ST. LOUIS, February 28, 1887.

A gradual increase in the number of enquiries has characterized the market for the week. One or two quite large sales of charcoal iron are reported, and a fair business has been done in Southern coke brands and Ohio softeners. There are also buyers in the field for car wheel irons, and, on the whole, the market presents a healthy appearance all along the line. The largest consumers are still experiencing difficulty in securing iron on their contracts in sufficient quantities to prevent inconvenience. The comparative quiet of the past month has been of great advantage to furnaces in helping them to get abreast of overdue orders. There are few Southern furnaces that can take orders for regular grades for delivery beginning earlier than April. A dispute between stove founders and the moulders' union has unsettled matters somewhat in that branch of the trade. All the foundries are still full of work and getting new orders. We quote for cash f. o. b. St. Louis:

HOT-BLAST CHARCOAL.	
Missouri.....	22 00 @ 22 50
Southern.....	23 00 @ 24 00
Ohio.....	— @ —
COKE AND COAL.	
Missouri.....	— @ —
Southern No. 1.....	— @ —
Southern No. 2.....	22 00 @ 22 25
Southern No. 3.....	21 50 @ 22 00
Ohio Softeners.....	22 00 @ 25 50
MILL IRONS.	
Missouri.....	21 00 @ 22 00
Southern No. 1.....	21 50 @ 21 75
Southern No. 2.....	21 00 @ 21 50
CAR-WHEEL AND MALLEABLE IRON.	
Southern.....	24 00 @ 28 00
Lake Superior.....	26 00 @ 27 00
MISCELLANEOUS.	
Old Rails.....	20 00 @ 21 00
Old Wheels.....	22 00 @ 23 00
Connellsville Coke, (Frick's).....	— @ 6 60

SINCE our first forms, containing the article on the big cotton-seed oil mill syndicate, went to press we learn that Mr. P. D. Armour and his partners, of Chicago, and other land refiners are members of this new organization. Mr. Armour states that "twelve of the largest cotton oil mills in the world will be erected immediately and equipped in time to grind the seed of the growing cotton plant. As to the location of these great mills four cities had thus far been determined upon, viz: Memphis, Atlanta, New Orleans, and Houston, Texas. The other eight cities had been selected, but some details must be perfected before announcing their definite location. The construction of these mills will inaugurate a revolution in cotton-seed oil and oil cake. Planters will then be able to get a fair price for seed, whereas now they are compelled to take whatever the trust company offers. The trade of the entire South will be greatly stimulated by this formidable organization." It is reported that Henry C. Butcher, of Philadelphia, will be president.

REGARDING the proposed railroad from Memphis to some point in Virginia on the Baltimore & Ohio and the Richmond & Alleghany roads, Mr. H. C. Parsons, the vice-president, writes us:

The intention is to make the road the Southern outlet for the Baltimore & Ohio and the Richmond & Alleghany, if proper contracts and alliances can be made. In connection with the Tennessee Central this undertaking means more for Baltimore and Richmond and the whole South than any recent movement. We have good reasons to expect that it will succeed.

ASHVILLE, ST. CLAIR CO., ALA.,
Feb. 26, 1887.

Editor Manufacturers' Record:

It was the Pawnee Land & Mineral Co. that I reported in the last issue of the MANUFACTURERS' RECORD as incorporated recently here. I now report several sales of mineral lands adjacent to Asheville to another syndicate; the names I can not give at this time, owing to the fact that the parties are operating here through an agent. The deeds will go on record next week. One of the purchases made by the syndicate is the iron hill owned by Judge Inzer; price paid about \$13,000, as I understand. Situated near this hill several other smaller tracks, owned by other individuals, have been purchased by the same parties. Our citizens have been looking to these transactions as an opening wedge to something on a larger scale, and it now looks as if their expectations are about to be met.

I hope in a short time to be able to send you the full particulars of these movements in the direction of development here. There are various rumors of railroads converging to this point, but, as reports are indefinite, I will not report them. GEO. R. CATHER.

To Erect a Cotton Factory.

SHELBY, N. C., Feb. 22, 1887.

Editor Manufacturers' Record:

A company has been organized to erect a cotton factory, with 2,000 to 3,000 spindles, in this place, and will use steam. The company is composed of B. Blanten, A. C. Miller, R. B. Miller and J. R. Oates, with capital of \$30,000. We hope to begin spinning warps by July 1st next. Contracts for bricks and lumber has been given out.

R. B. MILLER.

Building 1,000 New Coke Ovens.

NASHVILLE, TENN., Feb. 21, 1887.

Editor Manufacturers' Record:

We are building 800 new coke ovens at the Pratt mines, Ala., and 200 at Whitwell, Tenn. TENN. COAL, IRON & R. R. CO.
J. BAWSON, Treas.

Erecting Shingle Mill.

WELAKA, FLA., Feb. 23, 1887.

Editor Manufacturers' Record:

It is our intention to put in a saw mill if the trade demands it. We raise our shingle mill to-day. It is 30x56, double floor half way. DALLOW & RUSSELL.

Water Works to be Built.

CULLMAN, ALA., Feb. 26, 1887.

Editor Manufacturers' Record:

There is soon to be built at Cullman water works. The directors of the company are Geo. H. Parker, Adam Dreher, G. A. Print, Fred Allrick and John G. Cullman. J. H. Karter is secretary and Wm. Bower, treasurer. S. L. FULLER.

Car Works to be Reorganized.

CHATTANOOGA, TENN., Feb. 24, 1887.

Editor Manufacturers' Record:

The Wason Car & Foundry Co. is to be reorganized under a charter. The name will be changed to Chattanooga Car & Foundry Co. The incorporators are C. E. James, J. W. Adams, W. F. Marshall, S. B. Strang and H. Clay Evans. Propose to build freight cars and do a general line of machine and foundry work.

H. CLAY EVANS.

To Manufacture Gas Economizers.

NASHVILLE, TENN., Feb. 25, 1887.

Editor Manufacturers' Record:

The Southern Gas Light & Economizer Co. has been organized, and it is designed to erect shops in this city at once for the manufacture of the machines.

E. B. STAHELMAN, Pres.

To Erect a Compress.

ALEXANDRIA, VA., February 25, 1886.

Editor Manufacturers' Record:

A stock company has been organized, and money is now being subscribed for the construction of a cotton compress at this place. The success of the enterprise is well assured.

THOS. CRAWLY.

Building Street Railroads.

DALLAS, TEX., February 23, 1887.

Editor Manufacturers' Record:

The North Dallas Railway Co. was organized February 1, 1887; capital stock \$20,000; 4 miles; 10 cars. Franklin Priest, president; John H. Cole, vice-president; Will Hunstable, secretary; O. P. Bowser, treasurer. The manager has not yet been appointed, but W. A. Disborough is selected for the position. The Texarkana Street Railway Co. will give the contract to build their road to the T. & St. L. S. Ry. Cons. Co., of Dallas; W. A. Disborough, secretary.

W. A. DISBOROUGH.

TUSCALOOSA, ALA., Feb. 19, 1887.

Editor Manufacturers' Record:

I have bought a brick machine. Will commence work on the 21st instant.

J. L. MADDOX.

To Contract for Gas Works.

TAYLOR, TEXAS, Feb. 26, 1887.

Editor Manufacturers' Record:

The City of Taylor will contract with Messrs. Stein & Co., of Austin, Texas, for gas works for our city.

JOHN THREADVILL.

To Enlarge Soap Factory.

DALLAS, TEXAS, Feb. 23, 1887.

Editor Manufacturers' Record:

We have been engaged making soaps for the last 5 years, under the name of Wagner, Denni & Co., and we have gone into a chartered company. We will enlarge the business three-fold, in every respect, as to buildings, machineries, &c. The capital stock is \$50,000. EXCELSIOR SOAP & MFG. CO.

BIRMINGHAM, ALA., February 21, 1887.

Editor Manufacturers' Record:

The contract to build our street railroad from Birmingham to East Lake has been let to Pat Sullivan, of Atlanta, Ga., to be completed by May 1st. Steam motors will be used and 40-pound steel rails, all of which, with coaches, have been bought.

S. M. HANBY, Secretary,
East Lake Land Co.

Gas Works to be Enlarged.

BIRMINGHAM, ALA., Feb. 26, 1887.

Editor Manufacturers' Record:

The Birmingham Gas Works will enlarge their works to 4 times their capacity at present.

B. F. RODEN.

Erecting a Saw Mill.

FORT WHITE, FLA., Feb. 25, 1887.

Editor Manufacturers' Record:

I expect to have mill in operation here about the first of April; capacity 30,000 feet per day. Will put in planer later.

V. J. HERLONG.

Enlarged Distillery.

KERNSTOWN, VA., February 25, 1887.

Editor Manufacturers' Record:

I have enlarged my distillery and put in a new 30 horse-power boiler and 20 horse-power engine, the improvements costing nearly \$4,000 cash; the whole plant costing fully \$10,000. Next fall I shall add a 25-barrel daily hominy mill.

L. E. SAVAGE.

New Machinery.

FORT WORTH, TEXAS, Feb. 25, 1887.

Editor Manufacturers' Record:

We have not put in any new machinery in our machine shops here yet, but its our intention in the near future to put some in.

TEXAS & PACIFIC R. R.

To Develop Mineral Lands.

JACKSONVILLE, FLA., Feb. 21, 1887.

Editor Manufacturers' Record:

A Florida syndicate have purchased 6,000 acres of land, covering the Wilderness battleground, for the purpose of mining for iron and other minerals. Among the number is ex-Gov. Drew, Major McLaughlin, J. C. Greeley, S. C. Thompson, A. M. Ives and others.

J. C. GREELEY.

Will Build Branch Railroad.

ST. LOUIS, MO., Feb. 22, 1887.

Editor Manufacturers' Record:

We will build a branch from near Altheimer, on the line of the St. Louis, Arkansas & Texas Railway to Little Rock, within the next six months.

ST. LOUIS, ARK. & TEXAS R. R.

J. W. FORDYCE, Pres.

To Manufacture Tobacco.

HIGH POINT, N. C., Feb. 22, 1887.

Editor Manufacturers' Record:

We have formed a joint stock company for the manufacture of smoking tobacco exclusively from tobacco cured in our modern barn; we shall confine ourselves strictly to that justly famous tobacco. The style of the company will be the Modern Barn Smoking Tobacco Co.

W. H. SNOW.

New Machinery.

GRAHAM, N. C., Feb. 21, 1887.

Editor Manufacturers' Record:

I have bought mill and put in machinery for cutting spokes, rims and shuttle blocks, and also for making tobacco boxes.

E. S. PARKER.

Will Rebuild Saw Mill.

SIBLEY, LA., February 25, 1887.

Editor Manufacturers' Record:

Our saw mill was burned February 12th at 10 P. M. We were insured for \$4,000. We will rebuild at once.

J. G. LANE & SON.

Added a Saw Mill.

NEW ORLEANS, LA., Feb. 25, 1887.

Editor Manufacturers' Record:

I leased the works of the Crescent Stave & Manufacturing Co. in this city for two years, with the privilege of buying same at given price. I have added to it a circular saw mill with a capacity of 15,000 to 20,000 feet per day. Have got to work now, and will continue to keep the wheels rolling, if all goes right.

T. J. SULLMAN.

A Cotton Mill to be Rebuilt.

BROWNSVILLE, TENN., Feb. 23, 1887.

Editor Manufacturers' Record:

I intend organizing a company within the next ten days for the purpose of rebuilding the cotton mill at this place, and feel confident that the citizens will respond liberally to accomplish this work, as they now see the great necessity of having a cotton mill to work up the raw material raised in this county. We ship annually about 14,000 bales of cotton.

JOHN CLINTON.

Will Start a Canning Factory.

WINSBORO, S. C., Feb. 23, 1887.

Editor Manufacturers' Record:

Messrs. J. Q. Davis, J. H. Cummings, T. H. Kitchin and J. T. Chalmers will start a canning factory.

DU BOSE EGGLESTON.

Will Add Boiler Works.

BIRMINGHAM, ALA., Feb. 21, 1887.

Editor Manufacturers' Record:

We have the contract for the Albany, Ga., bridge, 180 feet swing on iron cylinder piers. We are also putting in new machinery, and intend to add boiler making to our business; also bolts, rivets and nuts.

W. L. SHIDELFR,

SOUTHERN BRIDGE CO.

Bridging the Potomac.

PHOENIXVILLE, PA., Feb. 26, 1887.

Editor Manufacturers' Record:

We are now building a bridge across the Potomac river, near Shepherdstown, W. Va., about 110 feet high, and in five spans of 167 feet each.

THE PHOENIX BRIDGE CO.

Building a Dye House.

HOPE MILLS, N. C., Feb. 23, 1887.

Editor Manufacturers' Record:

We are building a dye house 30x70 feet. Will have it finished April 1st. Heretofore we have had to send all our yarn to Philadelphia and have it dyed and returned. Contemplate enlarging our mill the coming summer.

HOPE MILLS MFG. CO.

S. H. COTTON, Man.

BIRMINGHAM, ALA., Feb. 21, 1887.

Editor Manufacturers' Record:

The Alabama Asphalt Co. has closed contract for sinking shafts, &c., on their property, and the work is now in progress, with prospects brightening as shaft goes down.

CHAS. M. ERWIN, Sec. and Treas.

75-Barrel Roller Flour Mill.

PILOT POINT, TEXAS, Jan. 17, 1887.

Editor Manufacturers' Record:

A company has been organized to build a 75-barrel roller mill here. Its name is the Pilot Point Roller Mill Co.

R. F. JOHNSON.



BUFFALO HAMMER CO., Buffalo, N. Y., U. S. A., Manufacturers of a full line of Solid Cast Steel Hammers, Sledges, Mauls,



RAILROAD TRACK TOOLS, &c.

Every Hammer or Tool having our name is fully warranted. Catalogues and discounts sent on application.

BACNALL & LOUD BLOCK CO. BOSTON, MASS.

Largest Manufacturers of Tackle Blocks in the World.

Manufacturers of the Latest Improved Self-Adjusting ROLLER BUSHED and GENUINE METALINE BUSHED and Iron Bushed Rope and Iron Strapped

TACKLE BLOCKS.

CLASP OPEN.



Improved Self-Adjusting Roller Bushed Iron Sheave.

Send for the Celebrated
STAR BRAND.

Improved Harcourt Patent Block.

Send for Catalogue
No. 5.

Improved Self-Locking Link Snatch Block.

PEERLESS.



The Gooch "Peerless"

And "Giant" Freezers.

OUR FREEZERS STAND UNRIVALED.

THE BEST GOODS EVER MADE.

Superior in Every Particular.

No other Freezers ever had such a sale. Send for Price-List and Discounts.

PRICES REDUCED FOR 1887!

MANUFACTURED BY THE

GOOCH FREEZER CO.28, 30, 32, 34, E. Ninth Street,
36 and 38

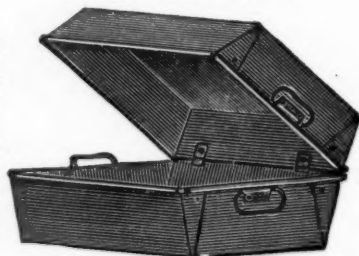
CINCINNATI, O.

GIANT



The Improved Roaster and Baker. A SELF-BAKING PAN.

Patented December 14, 1875.



The best device ever made for Roasting and Baking. Every pan warranted to give perfect satisfaction. Can be used as a double open pan, two single pans, and covered single pan. Low prices and Large Discounts to the Trade and Agents. For particulars address,

WACHS BROS. & CO., Patentees and Manfrs.
COVINGTON, KY.

Solid Forged Steel Shears & Scissors.

EVERY BLADE FORGED FROM BAR STEEL AND TEMPERED IN OIL. WE GUARANTEE SATISFACTION.



—Manufactured Solely by—

The **CLEVELAND MACHINE CO.**, CLEVELAND, OHIO.

WM. D. WINES,

Contractor for

IRON BUILDINGS AND IRON ROOFS

Corrugated and Galvanized

IRON WORKS,

44 Centre Street,

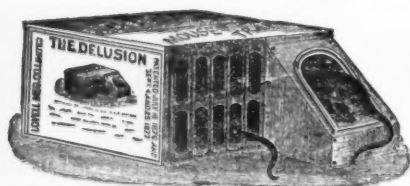
Established 1867.

NEW YORK CITY.

BERNHARD DIETZ, Manufacturer of Printers' Rollers, and Roller Composition. Factory, cor. Light and Mercer streets, Baltimore. Prices: Composition, (bulk) 30 cents per lb.; for Casting, also, 30 cents per lb. Orders by Mail promptly attended to.

DELUSION MOUSE TRAP

—52,932 Sold in One Month.—

THE ONLY SUCCESSFUL
Self-Setting TRAP."The mouse goes in to get the bait
And shuts the door with his own weight,
And then he jumps right through a hole
And thinks he's out; but, bless his soul,
He's in cage, somehow or other,
And sets the trap to catch another."

LOVELL MANUFACTURING CO., Limited, ERIE, PA.

To Secure **SOUTHERN TRADE**
ADVERTISE IN THE
MANUFACTURERS' RECORD.

WIER & WILSON

DIRECT REPRESENTATIVES:

HUBBARD & CO.	-	Axes, Shovels, Hoes and Saws.
AMERICAN SCREW COMPANY,	-	Screws, Bolts, Wire Nails, &c.
A. FIELD & SONS,	-	Tacks, and Nails.
WHEELING HINGE COMPANY,	-	Wrought Goods, Butts, &c.
OLIVER BROTHERS & PHILLIPS,	-	Heavy Hardware.
THE SHELTON COMPANY.	-	Philadelphia Carriage Bolts.
J. P. TOLMAN & CO.	-	Braided Sash Cord.
JOHN SOMMERS' SON,	-	Faucets.
NICHOLSON FILE CO.	-	Files.
HARTFORD HAMMER CO.	-	Hammers and Sledges.
THE HENRY C. HART MFG. CO.	-	Screen Frames, Lull & Porter, Blinds, Spring Hinges, &c.
LAWSON & BRENIZER,	-	Forks.
HOLROYD & CO.	-	Stocks and Dies.
BAKER CHAIN & WAGON IRON MFG. CO.	-	Wagon Hardware, Links, Rings, &c.

Office, No. 14 W. German Street,

CHARLES H. WIER.
JOHN K. WILSON.**BALTIMORE, MD.**

→ HARDWARE. ←

Baltimore WHOLESALE Prices.

ANVILS.	
Eagle and Vulcan.....	10 c. dis 20%
Wright's.....	9 1/2 c
Armstrong's Mouse Hole.....	9c
Trenton.....	10c
Wilkinson's.....	10c

AUGERS AND BITS.	
Conn. Valley Mfg. Co.....	extra, 60¢ & 10¢
Douglas Mfg. Co.....	No. 1, 60¢ & 10¢
Ives.....	dis 55¢ & 10¢
Cook's Douglas Mfg. Co.....	dis 55¢ & 10¢
Griswold.....	dis 50¢ & 10¢
Patent Solid Head.....	dis 25¢
Russell Jennings' Auger, Dowell, Machine.....	dis 10¢ & 10¢
Dowel and Hand Rail Bits.....	dis 10¢ & 10¢
Ives' "Jennings" Bits.....	dis 40¢ & 10¢
Expansive Bits, Clark's small, 1/8; large, 3/8.....	dis 35¢
Expansive Bits, Ives.....	dis 45¢
Expansive Bits Blake's.....	dis 20¢ and 30¢, dis 45¢
Hollow Augers, Ives.....	dis 25¢
Hollow Augers, Douglas.....	dis 25¢ & 10¢
Hol. Aug., Bonney's Adjust., 1/2 doz 1/8, 1/2 doz 3/8, 1/2 doz 1/2.....	dis 40¢
Hol. Aug., Stearns' Adjust., 1/2 doz 1/8, 1/2 doz 3/8, 1/2 doz 1/2.....	dis 20¢ & 10¢
Hol. Aug., Ives' Expansive, each 1/4, 1/2, 3/4, 1.....	dis 25¢ & 10¢
Hol. Aug., Universal Expansive, each 1/4, 1/2, 3/4, 1.....	dis 25¢ & 10¢
Wood's.....	dis 25¢
Gimlet Bits.....	dis 75¢ gross, dis 50¢
Gimlet Bits, Diamond.....	dis 25¢
Double Cut Gimlet Bits, Shephardson's.....	dis 40¢
Double Cut Gimlet Bits, Douglas.....	dis 40¢
Double Cut Gimlet Bits, Ives.....	dis 50¢ & 10¢
Morse's Bit Stock Drill.....	dis 50¢
L'Hommedieu's Ship Augers.....	dis 15¢

AWL HAFTS.	
Sewing Brass Ferrule.....	dis 35¢ gross—dis 40¢ & 10¢
Patent Sewing, Short.....	dis 40¢ & 10¢
Patent Sewing, Long.....	dis 40¢ & 10¢
Patent Peg, Plain Top.....	dis 45¢ & 10¢
Patent Peg, Leather Top.....	dis 45¢ & 10¢

AWLS, BRAD SETS, &c.	
Awls, Sewing, Common.....	dis 17¢—dis 35¢
Awls, Shouldered Peg.....	dis 35¢—dis 40¢
Awls, Patent Peg.....	dis 35¢
Awls, Shouldered Brad, 1/2 gross 1/2 doz.....	dis 25¢ & 10¢
Awls, Handled Brad.....	dis 40¢
Brad Sets, Aiken's.....	dis 45¢ & 10¢
Brad Sets, No. 42, 1/2 doz.....	dis 70¢ & 10¢
Brad Sets, Stanley's Exc., No. 1, 1/2 doz.....	dis 30¢ & 10¢
Brad Sets, Stanley's Exc., No. 2, 1/2 doz.....	dis 30¢ & 10¢
Brad Sets, Stanley's Exc., No. 3, 1/2 doz.....	dis 30¢ & 10¢

AXLES.	
Collins & Co.....	dis 70¢; beveled, 75¢
Lippincott or Mann's.....	dis 75¢
Single Bit, 1/2 to 3/4 and under.....	dis 75¢ net
Single Bit, 3/4 to 1 and over.....	dis 75¢ net
Single Bit, beveled.....	dis 75¢ net
Double Bit, 1/2 to 3/4 and under.....	dis 120¢ net
Double Bit, 3/4 to 1 and over.....	dis 120¢ net
Double Bit, beveled.....	dis 120¢ net
Second quality Axes.....	75 cts. less than above

AXLES.	
Sheldon & Co., iron.....	dis 55¢ off
steel.....	dis 55¢ off
AXLE GREASE—Fraser's.....	dis 5c.

BALANCES.	
Spring Balances.....	dis 50¢

BELLS.	
Hand, Light Brass.....	dis 75¢ & 10¢
Hand, White Metal.....	dis 70¢
Hand, Silver Chime.....	dis 25¢ & 10¢
Hand, Globe (Cone's Patent).....	dis 25¢ & 10¢
Gong, Abbe's.....	dis 25¢ & 10¢
Gong, Yankee.....	dis 40¢
Gong, Barton's.....	dis 40¢
Leon Reading.....	dis 25¢ & 10¢
Pull, Brook's.....	dis 50¢ & 10¢
Crank, Taylor's.....	dis 25¢ & 10¢
Lever, Sargent's.....	dis 55¢ & 10¢
Bloomfield.....	dis 20¢
Lever, R. & E. M. Co's.....	dis 45¢ & 10¢
Call.....	dis 40¢
Cow, Common Wrought.....	dis 55¢ & 10¢
Cow, Western, Sargent's List.....	dis 70¢ & 10¢
Cow, Kentucky, Sargent's List.....	dis 70¢ & 10¢
Cow, Moore's or Dodge's, Genuine Ky., new list:	
Nos. 0 1 1 1/2 2 3 5 6 Hog 1 dis 70¢ & 10¢	
dis 10¢ 10¢ 10¢ 10¢ 10¢ 10¢ 10¢ 10¢	
Cow, Texas "Star".....	dis 50¢ & 10¢

BELLows.	
Blacksmith's Common.....	dis 50¢ & 10¢
Molder's.....	dis 50¢
Hand Bellows.....	dis 50¢

BLIND FASTENERS.	
Francis.....	dis 20¢
Mackrell's.....	dis 20¢
Van Sand's Screw Pattern, 1/2 gross, net.....	dis 60¢
Van Sand's Old Pattern.....	dis 55¢
Merriman's.....	new list, net
Zimmerman's, 10 1/2 in.....	dis 30¢
Zimmerman's, 9 in.....	dis 30¢

BLIND STAPLES.	
Barbed, 1/2 in. and larger.....	dis 9c net
Barbed, 3/8 in.....	dis 10c net

BLOCKS.	
Penfield Blocks.....	dis 60¢ & 10¢
Bagnall & Loud.....	dis 60¢ & 10¢

BOLTS.	
Cast Iron Barrel Shutter, &c.....	dis 70¢
Cast Iron Chain (Sargent's list).....	dis 65¢ & 10¢
Wrought Barrel.....	dis 70¢
Wrought Square.....	dis 70¢
Wrt. Shutter, all Iron, Stanley's list.....	dis 60¢ & 10¢
Wrt. Shutter, Brass Knob, Stanley's list.....	dis 40¢ & 10¢
Wrought Shutter, Sargent's list.....	dis 60¢ & 10¢
Wrought Sunk Flush, Sargent's.....	dis 55¢ & 10¢
Wrought Sunk Flush, Stanley's.....	dis 40¢ & 10¢
Wrought B. K. Flush, Stanley's.....	dis 50¢ & 10¢
Carriage and Tire, Common, new list.....	dis 70¢ & 10¢
Carriage and Tire, Philadelphia Pattern, dis 75¢ & 10¢	
Carriage Bolts, Clarke's.....	dis 75¢ & 10¢
Norway.....	dis 75¢ & 10¢
R. B. & W. Carriage (old list).....	dis 70¢
Tire, American Screw Co's, Phila.....	dis 80¢
Tire, "Bay State".....	dis 65¢ & 10¢
Eagle Philadelphia Tire Bolt.....	dis 80¢
Stove.....	dis 67 1/2¢
Plow.....	dis 65¢
Machine.....	dis 70¢ & 10¢
Bolt Ends and Lag Screws.....	dis 70¢ & 10¢

BOLTS.	
Barbed, 1/2 in. and larger.....	dis 9c net
Barbed, 3/8 in.....	dis 10c net

BOLTS.	
Penfield Blocks.....	dis 60¢ & 10¢
Bagnall & Loud.....	dis 60¢ & 10¢

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Wrought Barrel.....	dis 70¢
Wrought Square.....	dis 70¢
Wrt. Shutter, all Iron, Stanley's list.....	dis 60¢ & 10¢
Wrt. Shutter, Brass Knob, Stanley's list.....	dis 40¢ & 10¢
Wrought Shutter, Sargent's list.....	dis 60¢ & 10¢
Wrought Sunk Flush, Sargent's.....	dis 55¢ & 10¢
Wrought Sunk Flush, Stanley's.....	dis 40¢ & 10¢
Wrought B. K. Flush, Stanley's.....	dis 50¢ & 10¢
Carriage and Tire, Common, new list.....	dis 70¢ & 10¢
Carriage and Tire, Philadelphia Pattern, dis 75¢ & 10¢	
Carriage Bolts, Clarke's.....	dis 75¢ & 10¢
Norway.....	dis 75¢ & 10¢
R. B. & W. Carriage (old list).....	dis 70¢
Tire, American Screw Co's, Phila.....	dis 80¢
Tire, "Bay State".....	dis 65¢ & 10¢
Eagle Philadelphia Tire Bolt.....	dis 80¢
Stove.....	dis 67 1/2¢
Plow.....	dis 65¢
Machine.....	dis 70¢ & 10¢
Bolt Ends and Lag Screws.....	dis 70¢ & 10¢

BOLTS.	
Barbed, 1/2 in. and larger.....	dis 9c net
Barbed, 3/8 in.....	dis 10c net

BOLTS.	
Penfield Blocks.....	dis 60¢ & 10¢
Bagnall & Loud.....	dis 60¢ & 10¢

BOLTS.	
Cast Iron Barrel Shutter, &c.....	dis 70¢
Cast Iron Chain (Sargent's list).....	dis 65¢ & 10¢
Wrought Barrel.....	dis 70¢
Wrought Square.....	dis 70¢
Wrt. Shutter, all Iron, Stanley's list.....	dis 60¢ & 10¢
Wrt. Shutter, Brass Knob, Stanley's list.....	dis 40¢ & 10¢
Wrought Shutter, Sargent's list.....	dis 60¢ & 10¢
Wrought Sunk Flush, Sargent's.....	dis 55¢ & 10¢
Wrought Sunk Flush, Stanley's.....	dis 40¢ & 10¢
Wrought B. K. Flush, Stanley's.....	dis 50¢ & 10¢
Carriage and Tire, Common, new list.....	dis 70¢ & 10¢
Carriage and Tire, Philadelphia Pattern, dis 75¢ & 10¢	
Carriage Bolts, Clarke's.....	dis 75¢ & 10¢
Norway.....	dis 75¢ & 10¢
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Wrought Sunk Flush, Sargent's.....	dis 55¢ & 10¢
Wrought Sunk Flush, Stanley's.....	dis 40¢ & 10¢
Wrought B. K. Flush, Stanley's.....	dis 50¢ & 10¢
Carriage and Tire, Common, new list.....	dis 70¢ & 10¢
Carriage and Tire, Philadelphia Pattern, dis 75¢ & 10¢	
Carriage Bolts, Clarke's.....	dis 75¢ & 10¢
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Eagle Philadelphia Tire Bolt.....	dis 80¢
Stove.....	

Building a Wagon Factory.

FAYETTEVILLE, ARK., Feb. 24, 1887.

Editor Manufacturers' Record:

We organized and commenced business on the 8th inst. We have contracted for and have nearly finished a 3-story shop of stone, 46 by 76 feet. We will not put in any new machinery at present, as adjoining planing mills have agreed to do our work that will require machinery.

SWETZER WAGON CO.

Stove Works and a Bloomery to be Built.

OXANNA, ALA., Feb. 24, 1887.

Editor Manufacturers' Record:

Stove works are to be built by B. F. Roden, of Birmingham, Ala., and a bloomery by A. C. Stuckey & Co., of Oxford, Ala.; both to be built in Oxanna, Ala., and the work to commence at once.

W. S. LARNED.

BRUNSWICK, GA., Feb. 23, 1887.

Editor Manufacturers' Record:

We intend to open up a bottling business in Waycross, Ga., in a few days.

LOYD & ADAMS.

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

ONE of the best hotels in Boston for business travelers or pleasure tourists is the American House, centrally and conveniently located and most excellently kept.

THE St. James Hotel, St. Louis, Mo. (opposite the "The Southern"), has the best location, and gives first-class accommodations for \$2.00 per day.

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, March 2, 1886.

	BID.	ASKED.
Virginia 6's Consols, C.	48	37
Virginia 3-4-5 10-40's	38	39
Virginia 3's new	64	65 1/2
Virginia Consol Coupons	36	
Virginia 10-40 Coupons	33	
North Carolina 4's	100	100 1/2
Wilmington, Col. and Aug. 6's	100 1/2	
Atlan. & Char. 1st, 7's	123	
Atlan. & Char Income 6's	104 1/2	104 3/4
Va. Midland, 3d, 6's	117	
Va. Midland 3d 5-6	108	
Va. Midland 4th 3-4-5	70	
Va. Midland 5th 5's	105	
Va. Midland Income 6's	95	
STERLING EXCHANGE.		
Selling, 60 days, 1st	48 1/2	
Shortsight	48	
Buying Commercial	48 3/4	48 3/4

\$250 SINGLE. \$350 DOUBLE.

With Saws and Tools.
Top Saw Frame can be added to Single Mill when desired. Capacity, 3,000 to 5,000 per day with 3 men. 10 to 15 horse portable engine will drive it. Agents wanted. Send for description and terms.

ROCKWOOD, NEWCOMB & CO.
180 to 190 S. Pennsylvania St., Indianapolis, Ind.**Two-Horse Power Engine. \$150.**

WITH STEEL BOILER.
Cheap, Reliable, Safe.
Automatic Boiler Feed.
Automatic Pop Safety Valve.
Steel Boiler. Cost of running guaranteed not to exceed one and one-half cents per horse power per hour. Less than half that of any kerosene engine of equal efficiency. Nothing equal to it ever before offered for the price. Send for free descriptive circular.

CHAS. P. WILLARD & CO.
284 Michigan Street, Chicago, Ill.

WOOD ENGRAVING
ELECTROTYPING
PRINTED SUPPLIES

Publishers of The Manufacturers' Exchange.

A. MUGFORD, Hartford, Conn.

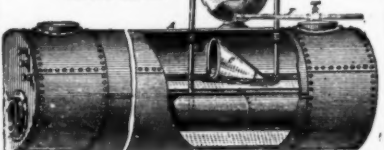
Morrison's Practical Engineer.

A concise treatise on Steam and General Machinery. Also Practical Tests on Electric Lighting. 172 pp. Second edition, revised and improved. Mailed on Receipt of \$1.00.

W. A. MORRISON,
Box 373. LOWELL, MASS.
Mention this paper.

HOW TO KEEP BOILERS CLEAN

And Prevent SCALING, FOAMING, BURNING. Price \$75.00. Removes Lime Oil, Magnesia, without use of Compounds

**Hotchkiss Mechanical Boiler Cleaner,**

Illustrated in an eighty-eight page book, which will be mailed FREE, to any address, by JAS I. HOTCHKISS, 98 JOHN ST., N. Y. Beware of infringers.

The Centennial Water Cut-Off, FOR CISTERNS.

It is the only Cut-Off that can be used in any position without extra pipe. Try them and you will use no other. For sale by the trade. Ask your jobber for them.

W. P. MYER

MANUFACTURER,
25 and 27 E. South St.,
INDIANAPOLIS, IND.

8-inch sample, by mail
11 50 cts. in stamps.

The following houses are special agents, who will furnish this Cut-Off at manufacturers' prices: G. H. MOSEMAN & CO., New York City; F. H. LAWSON & CO., Cincinnati, Ohio; HASLET, FLANAGAN & CO., Philadelphia, Pa.; L. F. HOFFMAN, San Antonio, Tex.; TROY STAMPING WORKS, Troy, N. Y.

MACHINERY FOR SALE!

Having purchased special machinery for use in our Pump and Fire Engine Factory, we offer For Sale New and Second-Hand Lathes, Drills and other Tools, which we will close out at a bargain.

Write for Machinery Circular and state what kind of machinery you want.

RUMSEY & CO. (Limited.)

Pump and Fire Engine Works,
SENECA FALLS, N. Y.

Notice to Contractors and Miners.

The Tennessee Coal, Iron and Railroad Co. is prepared to contract with responsible firm or person for the raising 1,000 to 1,500 tons per day of Iron Ore at its Mines near Birmingham, Ala., for a period of five, ten or fifteen years. The ore is red, fo-siliferous hematite, deposited horizontally and upthrown at an angle of about 25 degrees and outcrops for several miles on the top of a ridge. At the present workings it averages 23 feet in thickness where undisturbed. The ore is soft for a distance of about 300 feet from the outcrop and then becomes hard. The Contractor will be required to furnish equal quantities of the hard and soft ore. Tracks for loading will be put in by the Tennessee Coal, Iron and Railroad Co. at such point or points as may be required for convenience in loading. Coal can be supplied to the Contractor for machinery at \$1.25 per ton at Birmingham and unskilled labor can now be had for \$1.00 per day. Payments will be made monthly in Cash. Contractor will be required to give good bond for faithful performance of contract and bid f.o.b. cars at Mines. For further particulars apply to

Tennessee Coal, Iron & Railroad Co.

BIRMINGHAM, ALA.

D. W. K. PEACOCK,
Real Estate Agent,
CARTERSVILLE, GA.
Minerals a Specialty.

Refers to THE HOWARD BANK, Cartersville, Ga.
J. W. RANKIN, Atlanta, Ga.

WANTED!**Foreman for our Boiler Shop.**

He must be a thorough mechanic in his line, steady, and one who understands the control of men; must furnish first-class references. Will pay a liberal salary to the right kind of man. Address

ALFRED WEBB & CO., Chattanooga, Tenn.

COMMISSIONER'S SALE

OF

Valuable Mineral Property**INCLUDING A RAILROAD.**

Pursuant to a decree of the Circuit Court of Botetourt county, Virginia, entered at the October term, 1886, in the chancery causes of Armentrout and wife vs. M. W. Poague, et. al., and C. R. Mason's Administrator vs. J. F. Hughes, et. al., and Watkins, Cottrell & Co. vs. R. L. Goddard, et. al., the undersigned who were appointed for the purpose will on FRIDAY, APRIL 1st, 1887, at Gala Water Station, on the Richmond & Alleghany Railroad, Botetourt county, Virginia, offer for sale at public auction, to the highest bidder, that VALUABLE IRON ORE PROPERTY known as "BIG HILL," including the branch railroad, franchises and rights of way leading from said mines to and intersecting the Richmond & Alleghany Railroad at Gala Water Station.

The "Big Hill" Iron Property is considered one of the finest in this section of Virginia. It has been well developed, and the iron ore is found in inexhaustible quantities and of finest quality. There is running water on the property ample to wash the ore and the ore now being mined finds ready sale by reason of its superior quality.

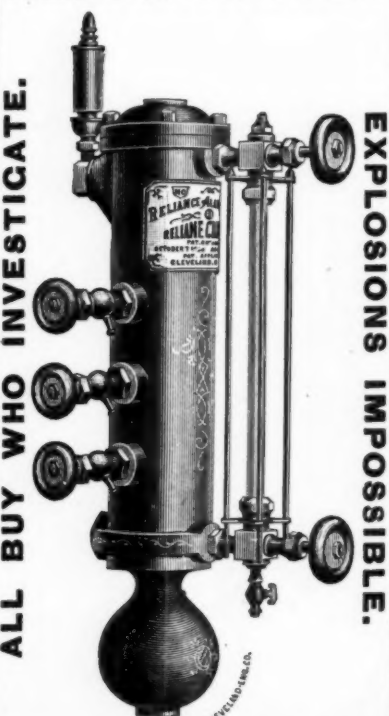
The improvements consist of three dwelling houses, a number of shanties for hands, wagon maker's shop and other out-buildings. The title to the property is clear.

Mr. R. H. Teaford, who resides on the property, will show expectant purchasers the premises; and for any further information, inquiries may be directed to Maj. Thos. C. Elder, Staunton, Va.; to F. T. Glasgow, Lexington, Va.; or to Capt. J. H. H. Figgat or T. H. Allen, Fincastle, Virginia.

Terms of Sale.—Cash in hand sufficient to pay the costs and expenses of sale, and the costs of the two suits of C. R. Mason's Administrator vs. Hughes, et. al., and of Watkins, Cottrell & Co. vs. R. L. Goddard, et. al., and the balance in three equal instalments, at one, two and three years respectively from the day of sale, with interest from that day; for which deferred instalments the purchaser shall be required to execute bonds with approved personal security, with waiver of homestead, and the title to be retained as ultimate security.

Thos. C. Elder,
Thurston H. Allen,
J. H. H. Figgat,
Frank T. Glasgow,
Special Comm'rs.

ROBT. K. THOMPSON,
Auctioneer.

RELIANCE ALARM GAUGES

ALL BUY WHO INVESTIGATE.

EXPLOSIONS IMPOSSIBLE.

AGENTS WANTED EVERYWHERE.

Illustrated Price-List Free.

RELIANCE GAUGE COMPANY,

Office, Argyle Building,

CLEVELAND, OHIO.

ICE MACHINE.

The advertiser, owning a first-class Ice Machine, desires a party to take an interest in same and erect it in any good Southern town. Party taking interest to manage the business, or if stock company is organized, owner will sell and take stock.

Address P. O. Box 249,

KANSAS CITY, MO.

ROOT'S NEW IRON BLOWER,**POSITIVE BLAST. IRON REVOLVERS, PERFECTLY BALANCED.**

Has fewer parts than any other Blower. Also, Blacksmith Blowers, Portable Forges, Tuyere Irons, and Gas Exhausters.

P. H. & F. M. ROOTS, Manufacturers,
CONNEVILLE, IND.

Send for Priced Catalogue.

THE AMERICAN CONTRACTOR.

A BUREAU OF INFORMATION.

THE ONLY PUBLICATION OF ITS KIND.

The object of this publication is to furnish information in advance of contracts, to Architects, Builders, Contractors, Decorators, Painters, Roofers, Manufacturers, Producers, Investors, Bankers, Plumbers, Gas Fitters, Sewer Builders, Bridge Builders, Insurance Men, Real Estate Men, Lumbermen, Foundrymen, Hardware Men, Iron Men, Railroad Men, Supplymen, Etc.

No one of the above named can afford to do without this Advance Information.

PUBLISHED EVERY SATURDAY

BY

B. EDWARDS & CO.,
Times Building, Chicago, Ill.

We have an able corps of Editors, Special Correspondents and Reporters throughout the U. S. and Canada; receive news daily by letter or wire, and besides, we receive daily about 1,000 papers; these alone are valued at over \$20,000 per annum.

We furnish Special Information to Yearly Subscribers only.

TERMS OF SUBSCRIPTION

TO ANY PART OF THE UNITED STATES OR CANADA.

WEEKLY EDITION:

One Copy, one Year, post-paid, in Advance, \$5 00
" " six months, " " 3 00
" " three " " " 2 00

MONTHLY EDITION:

First Saturday in each Month.
One Copy, one Year, post-paid, in Advance, \$2 00

FOREIGN COUNTRIES

BELONGING TO THE POSTAL UNION.
One Copy, one Year, post-paid, in Advance, \$6 00
" " six months, " " 3 50

Fresh sample copies not for sale.
Sample Copy, 3 or 4 weeks old, free.
Were it not for our valuable advertising space the price of this publication would be \$50.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers;—or Five Million Readers, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 20 cents for Book of 16 pages.

GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition (the 162nd) of our Book called "Newspaper Advertising." It has 176 pages, and among its contents may be named the following Lists and Catalogues of Newspapers: DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 100,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS in which to advertise every section of the country: being a choice selection in de up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a list which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

5,493 VILLAGE NEWSPAPERS in which advertisements are inserted for \$1 a line and appear in the whole lot—one-half of all the American Weeklies.

Sent to any address for THIRTY CENTS.

ICE CREAM FREEZERS.
Peerless—3 quart, \$1.50; 4 quart, \$2.50; 6 quart, \$3.75; 8 quart, \$5.00; 10 quart, \$6.25. Giant, with fly wheel, 14 quart, \$8.00; 18 quart, \$10.00; 24 quart, \$12.50; 30 quart, \$15.00; 36 quart, \$17.50; 42 quart, \$20.00. Discount, 50¢ to 10¢.
American—2 quart, \$1.75; 3 quart, \$2.50; 4 quart, \$3.75; 6 quart, \$5.00; 8 quart, \$6.25; 10 quart, \$7.50; 12 quart, \$8.75; 14 quart, \$10.00; 16 quart, \$11.25; 18 quart, \$12.50; 20 quart, \$13.75; 24 quart, \$15.00; 30 quart, \$17.50; 36 quart, \$20.00; 42 quart, \$22.50; 48 quart, \$25.00. Discount, 50¢ to 10¢.
Crown, single action, 2 quart, \$3.75; 3 quart, \$5.00; 4 quart, \$6.25; 6 quart, \$7.50; 8 quart, \$8.75; 10 quart, \$10.00; 12 quart, \$11.25; 14 quart, \$12.50; 16 quart, \$13.75; 18 quart, \$15.00; 20 quart, \$16.25; 24 quart, \$17.50; 30 quart, \$20.00; 36 quart, \$22.50; 42 quart, \$25.00; 48 quart, \$27.50; 54 quart, \$30.00. Discount, 50¢ to 10¢.
Crown, double action, with crank, 8 quart, \$10.50; 10 quart, \$12.50; 12 quart, \$14.50; 14 quart, \$16.50; 16 quart, \$18.50; 18 quart, \$20.50; 20 quart, \$22.50; 24 quart, \$25.00; 30 quart, \$27.50; 36 quart, \$30.00; 42 quart, \$32.50; 48 quart, \$35.00; 54 quart, \$37.50; 60 quart, \$40.00. Discount, 50¢ to 10¢.
Gem, double action, 2 quart, \$3.75; 3 quart, \$5.00; 4 quart, \$6.25; 6 quart, \$7.50; 8 quart, \$8.75; 10 quart, \$10.00; 12 quart, \$11.25; 14 quart, \$12.50; 16 quart, \$13.75; 18 quart, \$15.00; 20 quart, \$16.25; 24 quart, \$17.50; 30 quart, \$20.00; 36 quart, \$22.50; 42 quart, \$25.00; 48 quart, \$27.50; 54 quart, \$30.00; 60 quart, \$32.50. Discount, 50¢ to 10¢.
Crown Ice Chopper.....dis 35¢

KNOBES.
Carriage, (Jap'd & c gross).....dis 60¢ to 10¢
Base-Common.....dis 30¢ to 10¢
Hemlock Door Knob.....new list, dis 10¢ to 5¢
Door Mineral.....Same discounts as Door Locks.
Door Por. Jap'd.....Same discounts as Door Locks.
Door Por. Plated.....Same discounts as Door Locks.
Furniture Plain.....75¢ gross inch, dis 10¢
Furniture Wood Screws.....dis 25¢
Picture.....dis 60¢ to 10¢
Hemlock, Picture.....dis 35¢
Shutter, Porcelain.....dis 65¢

LADIES.
Melting & Skim'g, Monroe's Pat. dis 55¢ to 10¢
Melting, C & C.....dis 30¢ to 10¢

LAWN MOWERS.
Acme Buckeye, Easy & Excelsior, new list, dis 40¢ to 10¢

LINES.
Linen Fish.....dis 50¢
Wire Clothes, Galvanized, 100 feet.....dis 30¢ to 10¢

LOCKS AND LATCHES.
Cabinet, Eagle.....Changes made in list price
Cabinet, Gaylord.....of some numbers Jan. 1,
Cabinet, Bridgeport.....1881, dis 25¢ to 10¢
Cabinet, P. & F. Corbin.....dis 40¢
Trunk, new list, Jan. 1, 1881.....dis 15¢ to 10¢
Yale Lock Co., Flat Key.....dis 40¢
Plate.....dis 33¢ to 10¢

DOOR LOCKS, ETC.
Bradford.....List prices as revised
Norwalk.....Dec. 18th, 45¢ to 35¢
Norwich.....for cash.
P. & F. Corbin.....dis 75¢
Russell & Erwin.....and 25¢ for cash.
Mallory, Wheeler & Co.....dis 75¢
Nimick & Brittan Mfg. Co.....dis 75¢
Padlocks—Russell & Erwin.....dis 75¢
Mallory, Wheeler & Co.....dis 75¢
Norwich Lock Manf. Co.....dis 75¢
Wm. Wilcox & Co.....dis 75¢
Nimick & Brittan Mfg. Co.....dis 75¢
Wm. Wilcox & Co's Plate Locks.....dis 33¢ to 10¢
Yale Lock Manf. Co's "Standard".....dis 40¢
Romer's.....dis 25¢ to 10¢
Conestoga.....dis 80¢ to 10¢
Scandinavian, "Norwich".....dis 50¢ to 10¢
Nimick & Brittan's Buralar-Proof Locks.....dis 50¢ to 10¢

MALLETS.
Penfield Block Co., Apple, Hickory and
Lignumvitae.....dis 30¢
Ripley Mfg. Co.....dis 30¢

WEAT CUTTERS.
American.....\$5.00 \$7.00 \$10.00 \$12.00 \$25.00
American, B, 50.00; 5, 60.00; 10, 70.00; 15, 80.00; 20, 90.00; 25, 100.00; 30, 110.00; 35, 120.00; 40, 130.00; 45, 140.00; 50, 150.00; 55, 160.00; 60, 170.00; 65, 180.00; 70, 190.00; 75, 200.00; 80, 210.00; 85, 220.00; 90, 230.00; 95, 240.00; 100, 250.00; 105, 260.00; 110, 270.00; 115, 280.00; 120, 290.00; 125, 300.00; 130, 310.00; 135, 320.00; 140, 330.00; 145, 340.00; 150, 350.00; 155, 360.00; 160, 370.00; 165, 380.00; 170, 390.00; 175, 400.00; 180, 410.00; 185, 420.00; 190, 430.00; 195, 440.00; 200, 450.00; 205, 460.00; 210, 470.00; 215, 480.00; 220, 490.00; 225, 500.00; 230, 510.00; 235, 520.00; 240, 530.00; 245, 540.00; 250, 550.00; 255, 560.00; 260, 570.00; 265, 580.00; 270, 590.00; 275, 600.00; 280, 610.00; 285, 620.00; 290, 630.00; 295, 640.00; 300, 650.00; 305, 660.00; 310, 670.00; 315, 680.00; 320, 690.00; 325, 700.00; 330, 710.00; 335, 720.00; 340, 730.00; 345, 740.00; 350, 750.00; 355, 760.00; 360, 770.00; 365, 780.00; 370, 790.00; 375, 800.00; 380, 810.00; 385, 820.00; 390, 830.00; 395, 840.00; 400, 850.00; 405, 860.00; 410, 870.00; 415, 880.00; 420, 890.00; 425, 900.00; 430, 910.00; 435, 920.00; 440, 930.00; 445, 940.00; 450, 950.00; 455, 960.00; 460, 970.00; 465, 980.00; 470, 990.00; 475, 1000.00; 480, 1010.00; 485, 1020.00; 490, 1030.00; 495, 1040.00; 500, 1050.00; 505, 1060.00; 510, 1070.00; 515, 1080.00; 520, 1090.00; 525, 1100.00; 530, 1110.00; 535, 1120.00; 540, 1130.00; 545, 1140.00; 550, 1150.00; 555, 1160.00; 560, 1170.00; 565, 1180.00; 570, 1190.00; 575, 1200.00; 580, 1210.00; 585, 1220.00; 590, 1230.00; 595, 1240.00; 600, 1250.00; 605, 1260.00; 610, 1270.00; 615, 1280.00; 620, 1290.00; 625, 1300.00; 630, 1310.00; 635, 1320.00; 640, 1330.00; 645, 1340.00; 650, 1350.00; 655, 1360.00; 660, 1370.00; 665, 1380.00; 670, 1390.00; 675, 1400.00; 680, 1410.00; 685, 1420.00; 690, 1430.00; 695, 1440.00; 700, 1450.00; 705, 1460.00; 710, 1470.00; 715, 1480.00; 720, 1490.00; 725, 1500.00; 730, 1510.00; 735, 1520.00; 740, 1530.00; 745, 1540.00; 750, 1550.00; 755, 1560.00; 760, 1570.00; 765, 1580.00; 770, 1590.00; 775, 1600.00; 780, 1610.00; 785, 1620.00; 790, 1630.00; 795, 1640.00; 800, 1650.00; 805, 1660.00; 810, 1670.00; 815, 1680.00; 820, 1690.00; 825, 1700.00; 830, 1710.00; 835, 1720.00; 840, 1730.00; 845, 1740.00; 850, 1750.00; 855, 1760.00; 860, 1770.00; 865, 1780.00; 870, 1790.00; 875, 1800.00; 880, 1810.00; 885, 1820.00; 890, 1830.00; 895, 1840.00; 900, 1850.00; 905, 1860.00; 910, 1870.00; 915, 1880.00; 920, 1890.00; 925, 1900.00; 930, 1910.00; 935, 1920.00; 940, 1930.00; 945, 1940.00; 950, 1950.00; 955, 1960.00; 960, 1970.00; 965, 1980.00; 970, 1990.00; 975, 2000.00; 980, 2010.00; 985, 2020.00; 990, 2030.00; 995, 2040.00; 1000, 2050.00; 1005, 2060.00; 1010, 2070.00; 1015, 2080.00; 1020, 2090.00; 1025, 2100.00; 1030, 2110.00; 1035, 2120.00; 1040, 2130.00; 1045, 2140.00; 1050, 2150.00; 1055, 2160.00; 1060, 2170.00; 1065, 2180.00; 1070, 2190.00; 1075, 2200.00; 1080, 2210.00; 1085, 2220.00; 1090, 2230.00; 1095, 2240.00; 1100, 2250.00; 1105, 2260.00; 1110, 2270.00; 1115, 2280.00; 1120, 2290.00; 1125, 2300.00; 1130, 2310.00; 1135, 2320.00; 1140, 2330.00; 1145, 2340.00; 1150, 2350.00; 1155, 2360.00; 1160, 2370.00; 1165, 2380.00; 1170, 2390.00; 1175, 2400.00; 1180, 2410.00; 1185, 2420.00; 1190, 2430.00; 1195, 2440.00; 1200, 2450.00; 1205, 2460.00; 1210, 2470.00; 1215, 2480.00; 1220, 2490.00; 1225, 2500.00; 1230, 2510.00; 1235, 2520.00; 1240, 2530.00; 1245, 2540.00; 1250, 2550.00; 1255, 2560.00; 1260, 2570.00; 1265, 2580.00; 1270, 2590.00; 1275, 2600.00; 1280, 2610.00; 1285, 2620.00; 1290, 2630.00; 1295, 2640.00; 1300, 2650.00; 1305, 2660.00; 1310, 2670.00; 1315, 2680.00; 1320, 2690.00; 1325, 2700.00; 1330, 2710.00; 1335, 2720.00; 1340, 2730.00; 1345, 2740.00; 1350, 2750.00; 1355, 2760.00; 1360, 2770.00; 1365, 2780.00; 1370, 2790.00; 1375, 2800.00; 1380, 2810.00; 1385, 2820.00; 1390, 2830.00; 1395, 2840.00; 1400, 2850.00; 1405, 2860.00; 1410, 2870.00; 1415, 2880.00; 1420, 2890.00; 1425, 2900.00; 1430, 2910.00; 1435, 2920.00; 1440, 2930.00; 1445, 2940.00; 1450, 2950.00; 1455, 2960.00; 1460, 2970.00; 1465, 2980.00; 1470, 2990.00; 1475, 3000.00; 1480, 3010.00; 1485, 3020.00; 1490, 3030.00; 1495, 3040.00; 1500, 3050.00; 1505, 3060.00; 1510, 3070.00; 1515, 3080.00; 1520, 3090.00; 1525, 3100.00; 1530, 3110.00; 1535, 3120.00; 1540, 3130.00; 1545, 3140.00; 1550, 3150.00; 1555, 3160.00; 1560, 3170.00; 1565, 3180.00; 1570, 3190.00; 1575, 3200.00; 1580, 3210.00; 1585, 3220.00; 1590, 3230.00; 1595, 3240.00; 1600, 3250.00; 1605, 3260.00; 1610, 3270.00; 1615, 3280.00; 1620, 3290.00; 1625, 3300.00; 1630, 3310.00; 1635, 3320.00; 1640, 3330.00; 1645, 3340.00; 1650, 3350.00; 1655, 3360.00; 1660, 3370.00; 1665, 3380.00; 1670, 3390.00; 1675, 3400.00; 1680, 3410.00; 1685, 3420.00; 1690, 3430.00; 1695, 3440.00; 1700, 3450.00; 1705, 3460.00; 1710, 3470.00; 1715, 3480.00; 1720, 3490.00; 1725, 3500.00; 1730, 3510.00; 1735, 3520.00; 1740, 3530.00; 1745, 3540.00; 1750, 3550.00; 1755, 3560.00; 1760, 3570.00; 1765, 3580.00; 1770, 3590.00; 1775, 3600.00; 1780, 3610.00; 1785, 3620.00; 1790, 3630.00; 1795, 3640.00; 1800, 3650.00; 1805, 3660.00; 1810, 3670.00; 1815, 3680.00; 1820, 3690.00; 1825, 3700.00; 1830, 3710.00; 1835, 3720.00; 1840, 3730.00; 1845, 3740.00; 1850, 3750.00; 1855, 3760.00; 1860, 3770.00; 1865, 3780.00; 1870, 3790.00; 1875, 3800.00; 1880, 3810.00; 1885, 3820.00; 1890, 3830.00; 1895, 3840.00; 1900, 3850.00; 1905, 3860.00; 1910, 3870.00; 1915, 3880.00; 1920, 3890.00; 1925, 3900.00; 1930, 3910.00; 1935, 3920.00; 1940, 3930.00; 1945, 3940.00; 1950, 3950.00; 1955, 3960.00; 1960, 3970.00; 1965, 3980.00; 1970, 3990.00; 1975, 4000.00; 1980, 4010.00; 1985, 4020.00; 1990, 4030.00; 1995, 4040.00; 2000, 4050.00; 2005, 4060.00; 2010, 4070.00; 2015, 4080.00; 2020, 4090.00; 2025, 4100.00; 2030, 4110.00; 2035, 4120.00; 2040, 4130.00; 2045, 4140.00; 2050, 4150.00; 2055, 4160.00; 2060, 4170.00; 2065, 4180.00; 2070, 4190.00; 2075, 4200.00; 2080, 4210.00; 2085, 4220.00; 2090, 4230.00; 2095, 4240.00; 2100, 4250.00; 2105, 4260.00; 2110, 4270.00; 2115, 4280.00; 2120, 4290.00; 2125, 4300.00; 2130, 4310.00; 2135, 4320.00; 2140, 4330.00; 2145, 4340.00; 2150, 4350.00; 2155, 4360.00; 2160, 4370.00; 2165, 4380.00; 2170, 4390.00; 2175, 4400.00; 2180, 4410.00; 2185, 4420.00; 2190, 4430.00; 2195, 4440.00; 2200, 4450.00; 2205, 4460.00; 2210, 4470.00; 2215, 4480.00; 2220, 4490.00; 2225, 4500.00; 2230, 4510.00; 2235, 4520.00; 2240, 4530.00; 2245, 4540.00; 2250, 4550.00; 2255, 4560.00; 2260, 4570.00; 2265, 4580.00; 2270, 4590.00; 2275, 4600.00; 2280, 4610.00; 2285, 4620.00; 2290, 4630.00; 2295, 4640.00; 2300, 4650.00; 2305, 4660.00; 2310, 4670.00; 2315, 4680.00; 2320, 4690.00; 2325, 4700.00; 2330, 4710.00; 2335, 4720.00; 2340, 4730.00; 2345, 4740.00; 2350, 4750.00; 2355, 4760.00; 2360, 4770.00; 2365, 4780.00; 2370, 4790.00; 2375, 4800.00; 2380, 4810.00; 2385, 4820.00; 2390, 4830.00; 2395, 4840.00; 2400, 4850.00; 2405, 4860.00; 2410, 4870.00; 2415, 4880.00; 2420, 4890.00; 2425, 4900.00; 2430, 4910.00; 2435, 4920.00; 2440, 4930.00; 2445, 4940.00; 2450, 4950.00; 2455, 4960.00; 2460, 4970.00; 2465, 4980.00; 2470, 4990.00; 2475, 5000.00; 2480, 5010.00; 2485, 5020.00; 2490, 5030.00; 2495, 5040.00; 2500, 5050.00; 2505, 5060.00; 2510, 5070.00; 2515, 5080.00; 2520, 5090.00; 2525, 5100.00; 2530, 5110.00; 2535, 5120.00; 2540, 5130.00; 2545, 5140.00; 2550, 5150.00; 2555, 5160.00; 2560, 5170.00; 2565, 5180.00; 2570, 5190.00; 2575, 5200.00; 2580, 5210.00; 2585, 5220.00; 2590, 5230.00; 2595, 5240.00; 2600, 5250.00; 2605, 5260.00; 2610, 5270.00; 2615, 5280.00; 2620, 5290.00; 2625, 5300.00; 2630, 5310.00; 2635, 5320.00; 2640, 5330.00; 2645, 5340.00; 2650, 5350.00; 2655, 5360.00; 2660, 5370.00; 2665, 5380.00; 2670, 5390.00; 2675, 5400.00; 2680, 5410.00; 2685, 5420.00; 2690, 5430.00; 2695, 5440.00; 2700, 5450.00; 2705, 5460.00; 2710, 5470.00; 2715, 5480.00; 2720, 5490.00; 2725, 5500.00; 2730, 5510.00; 2735, 5520.00; 2740, 5530.00; 2745, 5540.00; 2750, 5550.00; 2755, 5560.00; 2760, 5570.00; 2765, 5580.00; 2770, 5590.00; 2775, 5600.00; 2780, 5610.00; 2785, 5620.00; 2790, 5630.00; 2795, 5640.00; 2800, 5650.00; 2805, 5660.00; 2810, 5670.00; 2815, 5680.00; 2820, 5690.00; 2825, 5700.00; 2830, 5710.00; 2835, 5720.00; 2840, 5730.00; 2845, 5740.00; 2850, 5750.00; 2855, 5760.00; 2860, 5770.00; 2865, 5780.00; 2870, 5790.00; 2875, 5800.00; 2880, 5810.00; 2885, 5820.00; 2890, 5830.00; 2895, 5840.00; 2900, 5850.00; 2905, 5860.00; 2910, 5870.00; 2915, 5880.00; 2920, 5890.00; 2925, 5900.00; 2930, 5910.00; 2935, 5920.00; 2940, 5930.00; 2945, 5940.00; 2950, 5950.00; 2955, 5960.00; 2960, 5970.00; 2965, 5980.00; 2970, 5990.00; 2975, 6000.00; 2980, 6010.00; 2985, 6020.00; 2990, 6030.00; 2995, 6040.00; 3000, 6050.00; 3005, 6060.00; 3010, 6070.00; 3015, 6080.00; 3020, 6090.00; 3025, 6100.00; 3030, 6110.00; 3035, 6120.00; 3040, 6130.00; 3045, 6140.00; 3050, 6150.00; 3055, 6160.00; 3060, 6170.00; 3065, 6180.00; 3070, 6190.00; 3075, 6200.00; 3080, 6210.00; 3085, 6220.00; 3090, 6230.00; 3095, 6240.00; 3100, 6250.00; 3105, 6260.00; 3110, 6270.00; 3115, 6280.00; 3120, 6290.00; 3125, 6300.00; 3130, 6310.00; 3135, 6320.00; 3140, 6330.00; 3145, 6340.00; 3150, 6350.00; 3155, 6360.00; 3160, 6370.00; 3165, 6380.00; 3170, 6390.00; 3175, 6400.00; 3180, 6410.00; 3185, 6420.00; 3190, 6430.00; 3195, 6440.00; 3200, 6450.00; 3205, 6460.00; 3210, 6470.00; 3215, 6480.00; 3220, 6490.00; 3225, 6500.00; 3230, 6510.00; 3235, 6520.00; 3240, 6530.00; 3245, 6540.00; 3250, 6550.00; 3255, 6560.00; 3260, 6570.00; 3265, 6580.00; 3270, 6590.00; 3275, 6600.00; 3280, 6610.00; 3285, 6620.00; 3290, 6630.00; 3295, 6640.00; 3300, 6650.00; 3305, 6660.00; 3310, 6670.00; 3315, 6680.00; 3320, 6690.00; 3325, 6700.00; 3330, 6710.00; 3335, 6720.00; 3340, 6730.00; 3345, 6740.00; 3350, 6750.00; 3355, 6760.00; 3360, 6770.00; 3365, 6780.00; 3370, 6790.00; 3375, 6800.00; 3380, 6810.00; 3385, 6820.00; 3390, 6830.00; 3395, 6840.00; 3400, 6850.00; 3405, 6860.00; 3410, 6870.00; 3415, 6880.00; 3420, 6890.00; 3425, 6900.00; 3430, 6910.00; 3435, 6920.00; 3440, 6930.00; 3445, 6940.00; 3450, 6950.00; 3455, 6960.00; 3460, 6970.00; 3465, 6980.00; 3470, 69

SILVER PLATED WARE.

Wm. Rogers Manf. Co.dis 50&10
Holmes, Booth & Hayden.....dis 50&10&15
Wallace's Steel Silver Plated....dis 33&10
Rogers Bros 1847.....dis 50&5
C. Rogers & Bro.....dis 50&10

SCREWS.

Standard new list, Feb. 15.

Flat Head Bright.....75
Round Head Blue.....70
Round Head Bright.....70
Flat Head Brass.....70
Round Head Brass.....65
Flat Head Blue (add 5% to net).....75
Continental Flat Head.....80
Brass and Silver Capped.....40
Japanned Flat Head.....70
Coach, Patent Gimlet Point.....dis 70
Coach, Common or Lag.....dis 25
Bed.....dis 25
Machine, Flat Head, Iron.....dis 55
Machine, Round Head, Iron.....dis 50
Bench, Iron.....dis 55&10
Bench, Wood, Beach.....dis 25
Bench, Wood, Hickory.....dis 20
Hand, Wood.....dis 25
Hand Rail, Sargent's.....dis 60
Hand Rail, Humason, Beckley & Co.'s.....dis 40
Hand Rail, Am. Screw Co., list Jan. 1, '81.....dis 70
Jack (Wilson's).....dis 25

SCREEN FRAMES AND MIXTURES.

Standard Window Screens No. 1, 1/2 doz \$4; 2, \$5
Door No. 5, dis 50&10
Window Corner Irons, No. 3, doz. st's, \$3
Door No. 6, " " \$3
Door Latches, 1/2 dozen, \$3.60.....dis 50
Porter's Patent Window and Door Screen Frames:

PER DOZ. SETS.

In 1m. Bl'k White. Walnut.
No. 20.....\$2.75 \$3.25
No. 21.....2.25 4.00
No. 22.....5.50 6.75
No. 23.....6.00 7.50
No. 30.....9.00 11.00

Porter's Corners—

No. 0. Corners and Sticks complete for a

three-foot window, 1/2 doz sets.....\$4

No. 1. Set for Window, 1/2 doz sets, Bronzed,

No. 1 1/2. " " 1/2 doz sets, Bronzed,

No. 4. " " 1/2 doz sets, Bronzed,

No. 1/4. " " or door, 1/2 doz sets,

No. 4 1/2. " " Bronzed, 1/2 doz sets, Nickel, \$3.00

No. 4 1/2. " " or door, 1/2 doz sets,

No. 2 1/2. " " Bronzed, 1/2 doz sets, Nickel, \$4.00

No. 3. " " 1/2 doz sets, Bronzed,

Window screen frames (Stuart's).....dis 25

SHEARS AND SCISSORS.

American (Cast) Iron.....dis 70&10
Pruning.....see Pruning Hooks and Shears
Barnard's Lamp Trimmers.....1/2 doz \$4.00
Tinners'.....dis 30
Massachusetts.....dis 80&10
Seymour's.....dis 60&10
Jersey Shears.....dis 80
J. Wlas & Son, Nickle, 50&5; Japanned, 60&10

SHEAVES.

Sliding Door, M. W. & Co., List.....dis 45&5
Sliding Door, R. & E. list.....dis 60&5
Sliding Door, Patent Roller.....dis 60&10&5
Sliding Door, Pt. Roller, Hatfield's.....dis 60&10&5
Sliding Door, Russell's Anti-Friction.....dis 60&10&5

Also see Hangers.

SHOVELS AND SPADES.

Ames, New List, November 1, 1885.....dis 20
Griffiths.....dis 50&5
Remington's (Lowman's Patent).....dis 30
Rowland's.....dis 60
Lippincott, new list.....dis 25
Husky, Bins & Co.....dis 25

SILVER PLATED HOLLOW WARE.

Wm. Rogers Manf. Co.....dis 50
Meriden Britannia Co.....dis 40

SOLDERING IRONS AND COPPERS.

Covert's Soldering Irons.....dis 35
Covert's Adjustable Coppers.....dis 35

SPOONS.

Britannia.....dis 60, 10&10
Tinned, Iron, Table and Tea.....dis 65
Tinned Iron Basting.....dis 30
German Silver.....dis 40&5

STONE.

Hindustan No. 1, 4c; Axe, 5c.....net
Sand Stone.....No. 1, 6c; dis 33&10
Washita Stone.....No. 1, 2c; net
Washita Stone, Slip.....No. 1, 45c; net
Arkansas.....\$1.50 lb; net

SQUARES.

Steel.....dis 60&10; full cases, dis 70&10
Iron.....dis 60&10; full cases, dis 70&10
Nickle Plated.....add \$3.50&4 doz net
Try Square and T Bevels.....dis 50&10
Diston's Try Square and T Bevels.....dis 40

TACKS, BRADS, AC.

American Iron Carpet Tacks, all kinds.....70
Steel Carpet Tacks, all kinds.....70
Swedes Iron Carpet Tacks, all kinds.....70
Swedes Iron Tacks.....67 1/2
Swedes Iron Upholsterers' Tacks.....67 1/2
Tinned Swedes Iron Tacks.....67 1/2
Tinned Swedes Iron Upholsterers' Tacks.....67 1/2
American Iron Cut Tacks.....67 1/2
Gimp and Lace Tacks.....67 1/2
Tinned Gimp and Lace Tacks.....67 1/2
Copper Tacks.....67 1/2
Copper Finishing and Trunk Nails.....50
Cigar Box Nails.....45
Finishing Nails.....60
Trunk and Clout Nails.....60
Tinned Trunk and Clout Nails.....60
Basket Nails.....60
Chair Nails.....60
Zinc Glaciers' Points.....45
Common and Patent Brads.....60
Hungarian Nails and Miners' Tacks.....60
Tinned Capped Trunk Nails.....50
Looking Glass Tacks.....40
Picture Frame Points.....40
Leathered Carpet Tacks.....40
Brush Tacks.....40

TAP BORERS.

Common and Ring.....dis 20
Ives' Tap Borers.....dis 15&10
Enterprise Mfg. Co.....dis 25

TOBACCO CUTTERS.

Enterprise Mfg. Co (Champion).....dis 20&10
Wood Bottom.....dis 25
All Iron.....dis 20
Wilson's.....dis 50

THERMOMETERS.

Fin Case.....dis 75&10
Storm Glasses.....\$1.25 doz.

TOW CABLES.

Winsted.....dis 9c. dis 5

TRAPS.

Game, Newhouse.....dis 35
Game, Oneida Pattern.....dis 60&10
Game, Blake's Patent.....dis 40&10
Mouse, Wood, Choker.....dis 10
Mouse, Round Wire.....dis 10
Mouse, Wire.....dis 10
Mouse, Catch-em-alive.....dis 10
Cyclon Mouse.....dis 60 cts.
Ideal Mouse.....dis 10
Boss.....dis 10
Rat, "Decoy".....dis 10
Delusion Mouse, per doz.....dis 10
Ideal.....dis 13.50 doz gross

TROWELS.

Lothrop's Brick and Plastering.....dis 30
Reed's Brick and Plastering.....dis 15
Diston's Brick and Plastering.....dis 20&10
Clement & Maynard's.....dis 20
Worrall's Brick.....dis 20
Brades & Walby's.....dis 20
Garden.....dis 55
Rose's Brick.....dis 15

TRUCKS (WAREHOUSE, AC.)

Handy Truck.....dis 50 net
Penfield Block Co.'s list, 1888.....dis 35
Peerless, with Cogs, No. 3.....500
Peerless, with Cogs, No. 4.....600
Eureka, No. 2.....dis 40 00

VISES.

Cheney's Combined Vise and Anvil.....dis 30
Solid Box—Wilson's.....dis 50&10
Trenton.....dis 40&5
Iron City Tool Works.....dis 50&10
Manner Drill Mfg. Co's—
Machinist's Vise.....\$36.00 doz. dis. 50
Bench—Wilson's.....dis 45
Trenton.....dis 25
Parker's.....dis 20
Prentiss's.....dis 25
Bonney's.....dis 35
Well Wheels.....dis 60&10
Stephen's Patent Vises.....dis 15

WIRE.

Brass and Copper, list of Jan. 17, 1884.....dis 25
Bright and Annealed.....Nos. 0&18, dis 60&10
Bright and Annealed.....Nos. 16&18, dis 65
Bright and Annealed.....Nos. 27&30, dis 65
Coppered.....Nos. 0&18, dis 65
Galvanized, Nos. 0 to 18.....Market list dis 40
Finned, Nos. 0 to 18.....dis 60
Tinned Broom Wire, Nos. 18 to 25.....dis 60
Annealed Fence, Nos. 8&9.....dis 65
Annealed Grape, Nos. 10 to 14.....dis 65
Fence Staples, Galvanized.....dis 50
Japanned Barb Fence.....dis 40
Galvanized Barbed Fence.....dis 50
Buck Thorn Galvanized.....dis 50
Picture Wire.....dis 60
Clothes Line Wire, Galvanized.....dis 75
Wire Cloth, gree, drab and black.....sq ft ac net

WIRE NAILS.

Standard Penny Nails.....\$3.75 Base.
Wire Nails List, April 13, 1886.....dis 50&5

WRENCHES.

American Adjustable.....dis 45
Baxter's Adjustable "S," list Jan., 1880.....dis 35
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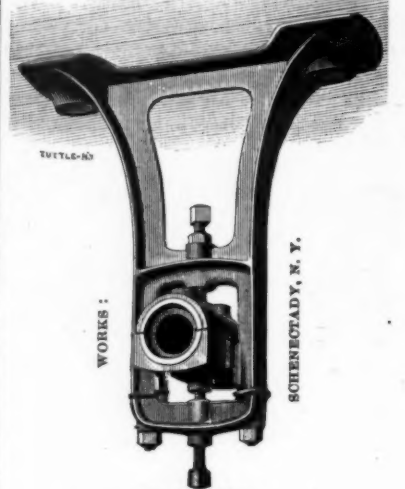
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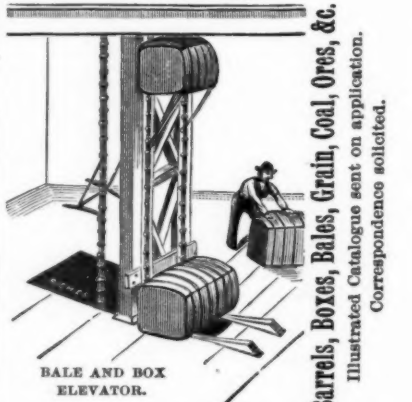
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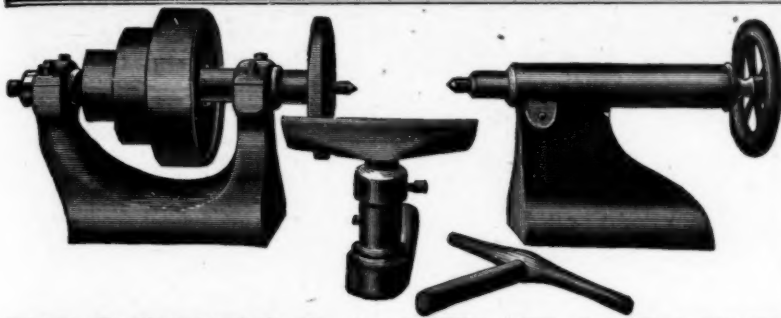
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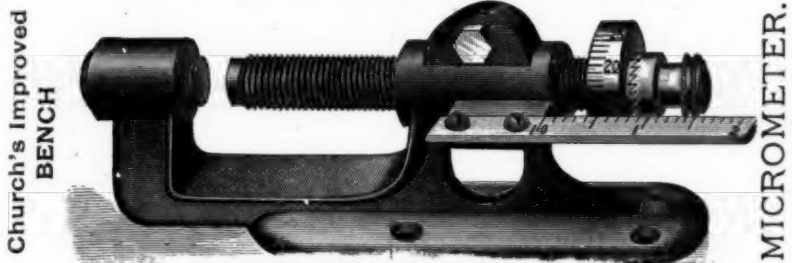
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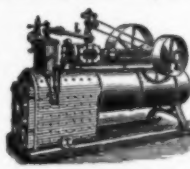
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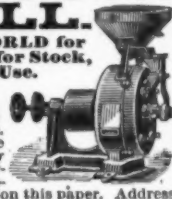
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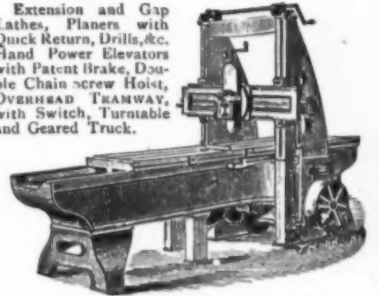
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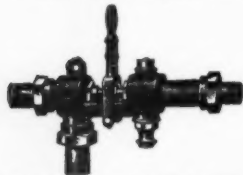
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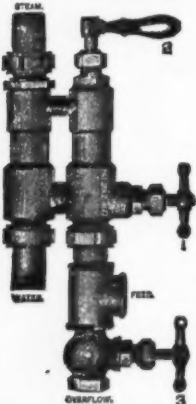
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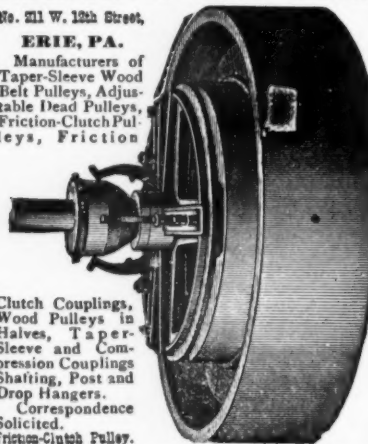
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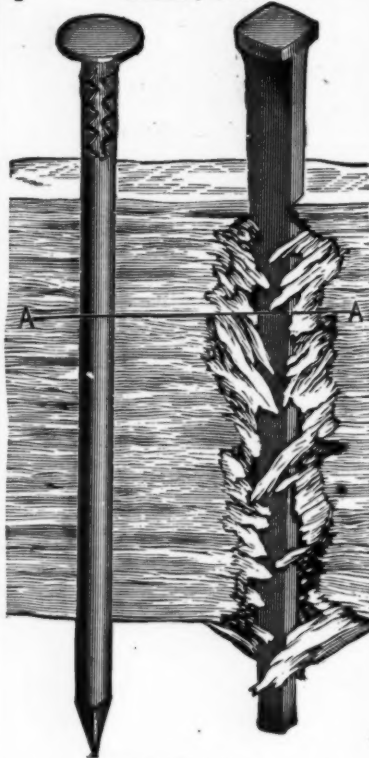
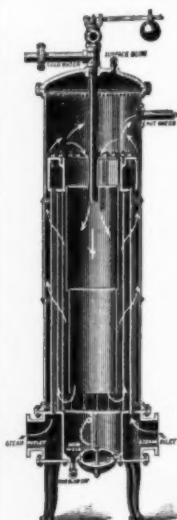
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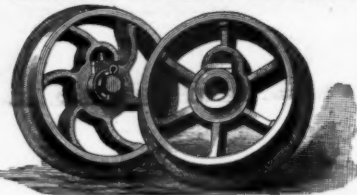
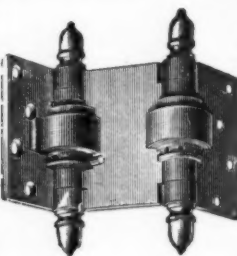
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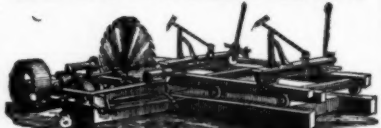
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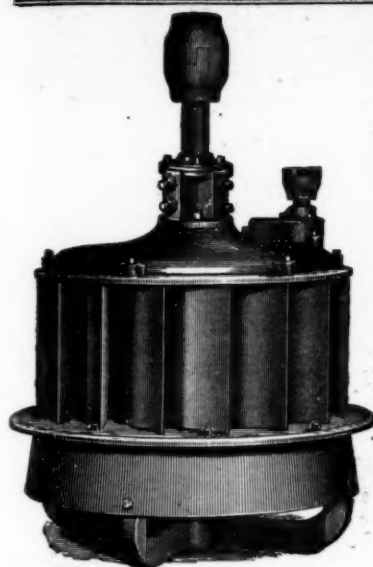
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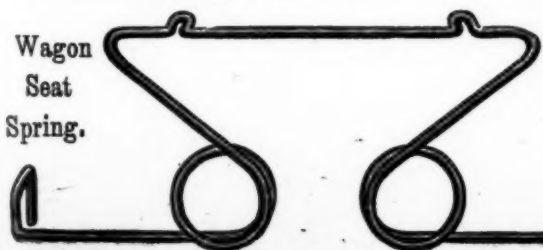


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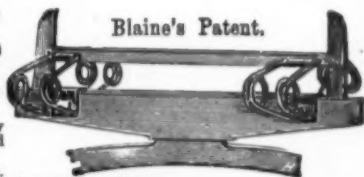
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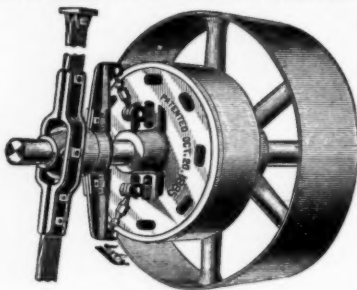
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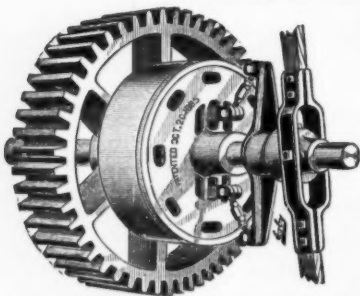
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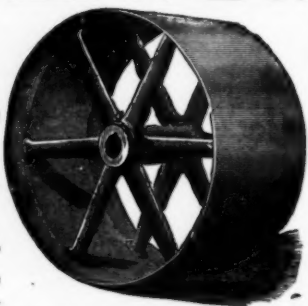
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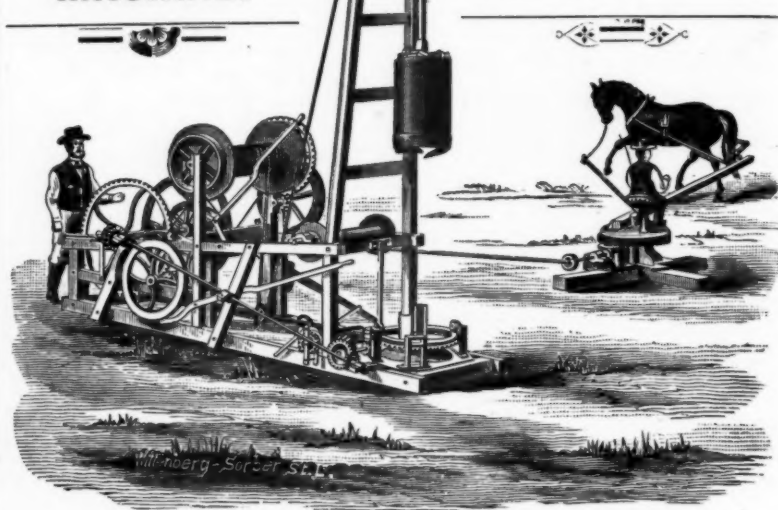
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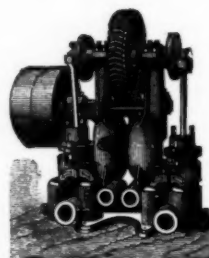
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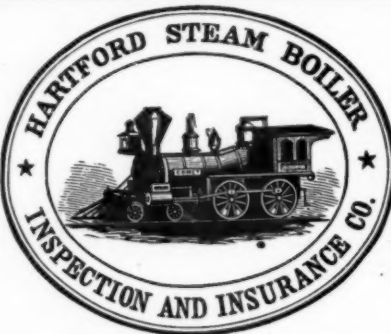
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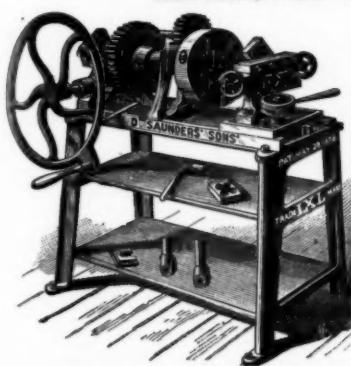


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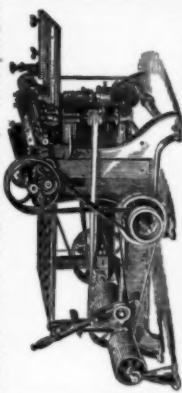
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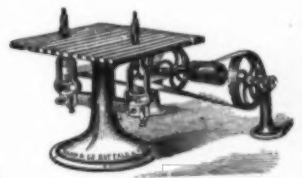
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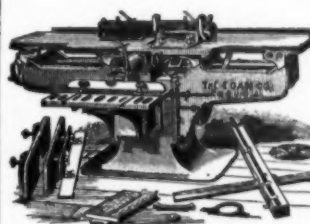
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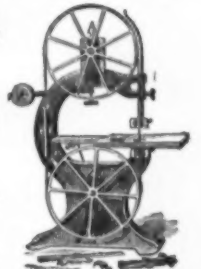
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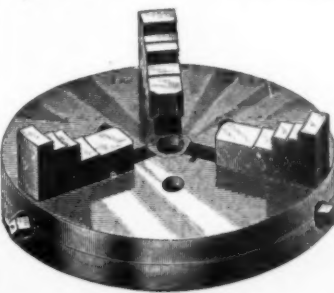
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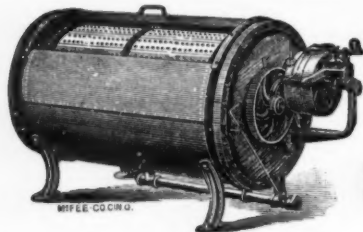
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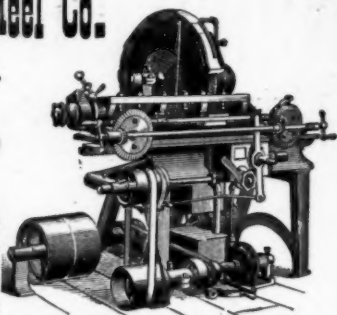
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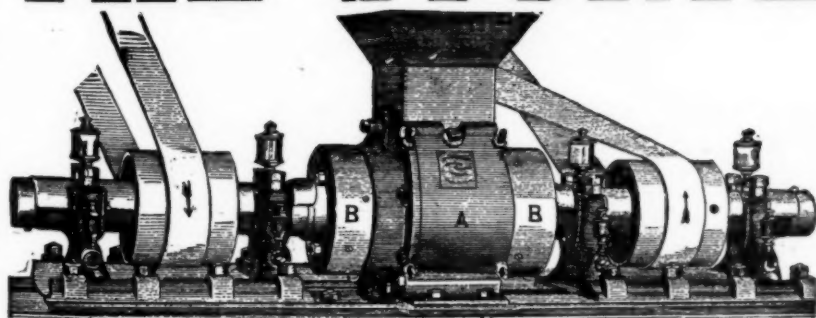
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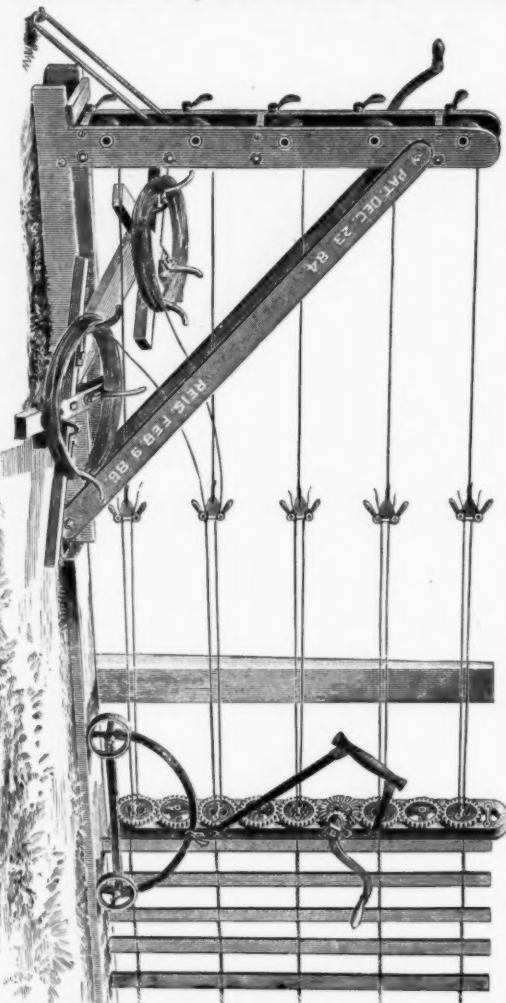
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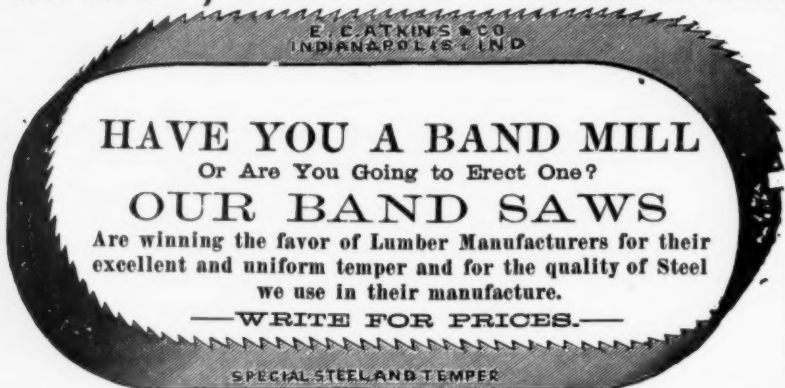
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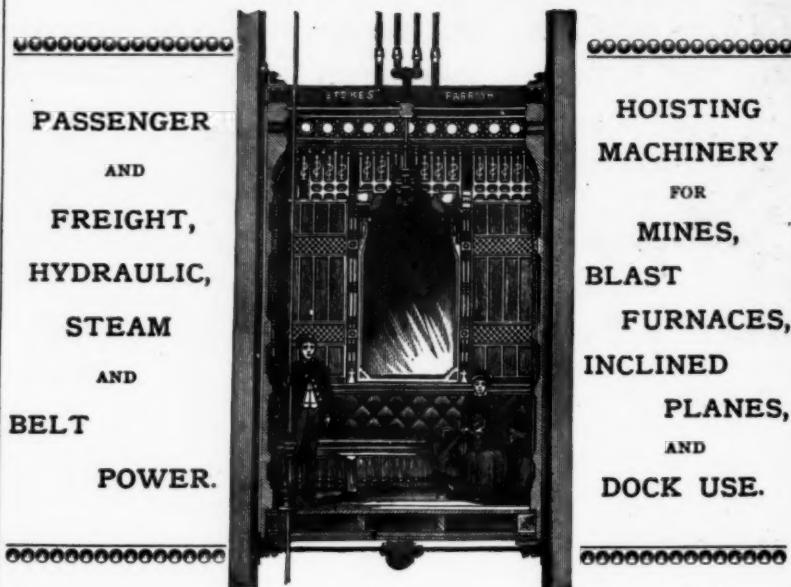
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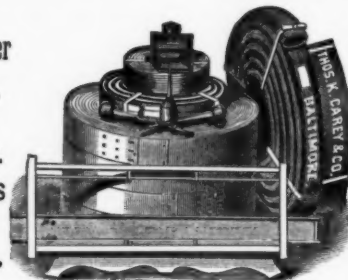
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